

# DUNMORE LAKES EXTRACTION PROJECT INDEPENDENT ENVIRONMENTAL AUDIT 2023

Prepared for Dunmore Sand and Soil Pty Limited

*Prepared by EPS*

**PART LOT 6 IN DP 611159;  
PART LOT 3 AND LOTS 4 & 5 IN DP 1030504;  
PART LOTS 5 & 6 IN DP1001931; AND  
LOT 1 IN DP 213575.**

Reference No. 11600    February 2024

# EPS

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## Contact Information and Declaration

**Declaration:** The opinions and declarations in this Independent Environmental Audit (IEA) are ascribed to Environmental Property Services (EPS) and are made in good faith and trust that such statements are neither false nor misleading. In preparing this IEA, EPS has considered and relied upon information obtained from Dunmore Sand and Soil Pty Limited and the public domain, supplemented by discussions between key EPS staff, representatives from governing agencies and independents.

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Tabbita Rd, Dunmore NSW.



## Quality Assurance and Version Control Table

**Project** Dunmore Sand and Soil Quarry

**Client** Dunmore Sand and Soil Pty Limited

Rev No.	Date	Reference	Author	Reviewer
01	12/12/2023	20231212_11600_Boral IEA	S.McCall, A.Tipper, S.Duffy, T.Pye	S.McCall & S.Duffy
02	15/12/2023	Draft V01 issued to Boral for review	S.McCall, A.Tipper, S.Duffy	S.McCall S.Duffy
<b>Final Version</b>	16/02/2024	Final for Boral issue to DPIE	S.McCall S.Duffy	S.McCall S.Duffy

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## EXECUTIVE SUMMARY

This Independent Environmental Audit has been prepared in accordance with Schedule 5, Condition 10 of the Development Consent DA 195-8-2004 for Dunmore Lakes Sand Extraction Project (also referred to as Dunmore Sand and Soil). The quarry is owned and operated by Dunmore Sand and Soil Pty Limited. Schedule 5, Condition 10 includes requirements for assessment of compliance with the Development Consent and the Environmental Protection Licence (EPL). It also provides for assessment of environmental performance of the site and, where applicable, issuing recommendations for improvement.

This audit has been conducted and prepared with consideration of the *AS/NZS 19011:2019 Guidelines for auditing management systems*.

### CLOSE-OUT OF 2020 AUDIT

The 2020 audit findings were reviewed, and an assessment was made regarding the sufficiency of actions implemented by Boral Resources in response. Of the 5 recommendations identified all have been completed and are considered satisfactory.

### COMPLIANCE WITH DEVELOPMENT CONSENT 2023 AUDIT

The findings of assessment against the conditions in Schedule 2 – 5 of the Development Consent is presented below. Of the 142 conditions, 101 were assessed as compliant, 9 non-compliant, 31 N/A and 1 not able to be determined.

Table 1-1: Assessment findings against conditions in Schedule 3-5

Schedule	Audit Finding				Total
	Compliant	Non-compliant	N/A	Not Able to Determine	
2	10	0	9	0	19
3	79	7	13	1	100
4	2	0	7	0	9
5	10	2	2	0	14
<b>Total</b>	<b>101</b>	<b>9</b>	<b>31</b>	<b>1</b>	<b>142</b>



## COMPLIANCE WITH EPL 2023 AUDIT

Since 2020, 1 non-compliance was recorded, and it relates to licence condition M2.2. The non-compliance resulted from an EPA inspection but did not result in the issue of a Penalty Notice.

## COMPLIANCE WITH CONTROLLED ACTIVITY APPROVAL

Dunmore Sand and Soil holds two Controlled Activity Approvals and was found to be in compliance with these approvals.

## ADEQUACY OF STRATEGIES, PLANS AND PROGRAMS 2023 AUDIT

A number of project strategies, plans and programs have been reviewed and updated since the 2020 audit and Mod 2 Consent in line with the revised consent conditions. Overall, documents are considered adequate for the purposes as they meet the conditioned requirements, follow a relatively consistent structure and are operational documents.

In summary, the plans have been reviewed and revised in accordance with the Mod 2 conditions of consent and the 2020 Audit recommendations. A number of recommendations are made to improve the project documents and to help ensure they remain current, including updating the document control table for each plan following each review and any change.

## OVERALL ASSESSMENT OF ENVIRONMENTAL PERFORMANCE 2023 AUDIT

Noting there are a number of matters that require improvement, the overall environmental performance based on the observed condition of the site, the low number of non-compliances and incidents, and low number of complaints, is considered **'satisfactory'**.


The interviews with DP&E, EPA, CCC and Shoalhaven Council all confirmed that Boral operate the sand and soil extraction well, with no major concerns raised and commendation for the responsiveness of the Boral staff. Some of the minor non-compliance actions appear to have occurred as a result of change in staff over the audit period. The re-occurrence of similar non-compliance actions have been addressed by Boral through improved environmental management systems.

The site inspection and interviews undertaken as part of this audit also confirmed that Boral have good environmental management systems in operation, with a high level of confidence in implementation of the environmental management systems, that extends to accountability and follow up from staff on the ground to senior management within Boral.



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**APPENDIX 5 Department of Planning and Environment – Independent Environmental Audit  
2023 Correspondence**





# 1. INTRODUCTION

## 1.1. BACKGROUND

Environmental Property Services (EPS) has been approved by Department of Planning and Environment (DP&E) to complete the Independent Environmental Audit (IEA) of the Dunmore Lakes Sand Extraction Project (also referred to as Dunmore Sand and Soil). The quarry is owned and operated by Dunmore Sand and Soil Pty Limited (Boral). Located on Tabbita Road, approximately 12km north-west of Kiama, the quarry is adjacent to Boral Hard Rock Quarry and the Boral Dunmore Concrete Batching Plant. The audited quarry produces sand and soil, which are critical components of building and construction materials such as concrete and asphalt.

The quarry, originally approved in June 2005 (DA 195-8-2004), has been the subject of three (3) modifications. A summary of the approved modifications is as follows:

- Modification 1 – Changing the timing of realignment of Rocklow Creek to a later date, rather than prior to undertaking sand extraction within Stage 3.
- Modification 2 – Establishment of a new extraction area (Stage 5).
- Modification 3 – Allow importation and dispatch of 120,000 tonnes per annum of sand based VENM (known as excavation sand) from ongoing building projects within the surrounding regions.

It is noted that Modification 3 was approved before Modification 2.

At the time of writing no further modifications are lodged or under assessment.

The current consolidated consent is attached in Appendix 1.

This audit has been completed to satisfy Schedule 5, Condition 10 of the current development consent.

The previous audit was completed by International Environmental Consultants Pty Limited in 2020.



## 1.2. AUDIT SCOPE AND SCHEDULE

### 1.2.1. Audit Scope

This audit is designed to address the requirements of Schedule 5, Condition 10 of DA 195-8-2004 as amended by Modification 2 (the latest modification that includes Modification 3). The requirements are as follows:

- a. Be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary;
- b. Include consultation with the relevant agencies and the CCC;
- c. Assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licences (including any assessment, plan or program required under these approvals);
- d. Review the adequacy of any approved strategies, plans or programs required under the abovementioned approvals;
- e. Recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals; and
- f. Be conducted and reported to the satisfaction of the Secretary.

### 1.2.2. Audit Timeframe

The audit period for the 2020 IEA is November 2020 to November 2023.

## 1.3. REPORT STRUCTURE

This report has been structured as follows:

- Executive Summary
- Section 1 – Introduction: background, scope, timeframe and contextual information.
- Section 2 – Audit Methodology: overview of the methodology used to conduct and deliver the audit and the terminology used within the audit report.
- Section 3 – Previous Environmental Audit: results and responses to the previous environmental audit and an assessment of response adequacy.
- Section 4 – Compliance with the Development Consent: review of compliance with the development consent DA 195-8-2004 as amended by Modification 2.
- Section 5 – Compliance with the EPL: review of compliance with EPL 11147.
- Section 6 – Adequacy of Strategies, Plans and Programs: review of adequacy of approved strategies, plans or programs required under the consent.
- Section 7 – Audit Conclusions.



## 2. AUDIT METHODOLOGY

This audit has been conducted and prepared with consideration of the *AS/NZS 19011:2019 Guidelines for auditing management systems*. The method used to conduct the audit can be summarised as follows:

### **Document Review**

The following documents were reviewed as part of the document review process:

- The project Environmental Impact Statement (EIS) and modifications;
- Previous audit report;
- Management strategies, plans and programs;
- Monitoring records and reports;
- Correspondence between Boral and relevant agencies; and
- Guidelines and standards.

A complete list of the documents reviewed as part of this audit is contained in Appendix 4.

### **Consultation**

Consultation was undertaken with the following key government agency and Community Consultative Committee members as part of the audit:

- Georgia Dragicevic – Department of Planning and Environment;
- Matthew Davidson and Jarryd Thomson– Environmental Protection Agency;
- Mark Miller – Shellharbour City Council; and
- James Bailey – Community Consultative Committee.

### **Interviews**

Interviews with the following relevant staff members were completed as part of the audit:

- Brodie Bolton - Quarry Manager - Dunmore Sand and Soil
- Matt Bray - Environment and Stakeholder Advisor - Dunmore Operations
- Sharon Makin - Environment Business Partner - Southern NSW

### **Site Inspection/Visual Verification**

The site was inspected, and interviews undertaken, over the course of two days 21/11/2023 – 22/11/2023 by the Lead Auditor (Steve McCall) and one of the Audit Assistants (Ruby McCall). The interviews occurred on 21/11/2023 and the site inspection on 22/11/2023.

## 2.1. TERMINOLOGY

The terminology listed in Table 2-1 has been applied when assessing compliance with the Development Consent, Environment Protection Licence (EPL) and the adequacy of other strategies, plans and programs.

Table 2-1: Terminology

Term	Definition
<b>Compliant</b>	Processes have been established and implemented that are consistent with the requirement.
<b>Non-compliant</b>	Failure to develop and/or implement processes to meet the requirement to an effective standard.
<b>Opportunity for improvement (recommendation)</b>	Identification of an opportunity to improve processes or implement changes to add value or clarify compliance with requirements.
<b>N/A, Non-applicable</b>	Requirement not applicable to this audit. May have been updated in previous audit.
<b>Not able to determine</b>	Compliance not able to be assessed as the information available was not sufficient.
<b>Complete</b>	Non-compliances from the previous audit have been addressed and finalised.
<b>Incomplete</b>	Non-compliances and recommendations from the previous audit have not been finalised.
<b>Satisfactory</b>	The actions implemented in response to non-compliances and recommendations from the previous audit are sufficient.

## 2.2. AUDITOR QUALIFICATIONS

Schedule 5, Condition 10 specifies the audit “be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary”.

Correspondence from nominee of the Planning Secretary dated 19/10/2023 endorsed Steve McCall as lead auditor.

EPS previously completed the 2017 and 2020 IEA for Boral Hard Rock (the adjacent quarry), but otherwise do not have any involvement with Dunmore Lakes/Sand and Soil.

## 2.3. AUDIT RESPONSE AND CLOSE-OUT

Boral was provided the opportunity to respond to the recommendations and provide evidence of implementation of actions prior to audit close out. Where applicable, these responses are presented in the compliance tables as evidence or commitments. Where the response was deemed sufficient to close-out the audit finding and assessment of ‘satisfactory’ or ‘complete’ has been provided in parentheses.



## 2.4. RISK ASSESSMENT

In accordance with *AS/NZS 19011:2019 Guidelines for auditing management systems*, each non-compliance has been assigned as risk rating.

Table 2-2: Risk Assessment Definitions

Risk Rating	Definition
Low	Minor/administrative risk.
Medium	Significant risk that can cause an impact but not considered serious or major.
High	Serious major risk to environment and project.



### 3. 2020 INDEPENDENT ENVIRONMENTAL AUDIT CLOSE-OUT

This section provides an overview of the *Dunmore Lakes Sand Project Independent Environmental Audit November 2020* (International Environmental Consultants Pty Limited, 2020). It summarises the actions taken by Boral in response to the recommendations and non-compliances identified in the previous audit.

#### 3.1. 2020 AUDIT FINDINGS PROGRESS

Five (5) recommendations were made in the 2020 audit and are presented in Table 3-1 along with progress noted during the 2023 audit.

Table 3-1: 2020 Audit Close-Out

#	Consent Condition/Issue	2020 Audit Finding	Response/Action	Evidence Noted During the 2023 Audit	2023 Conclusion
DSS1/20	Schedule 3, Condition 24 – Water Quality Objectives	The water quality goals listed in Table 7 of Condition 24 of Schedule 3 be reviewed and updated with appropriate Site Specific Trigger Values (SSTV) based on long term ambient monitoring data that is now available. There is an opportunity to do this with the new planning consent anticipated for the Stage 5 project.	<p>The need for SSTV has been discussed with DP&amp;E within the draft conditions for MOD 2. The conditions issued for MOD 2 continue to include the previous WQO described in condition 24 of MOD 3 (refer to Table 4). It is proposed that, as suggested by the auditor, SSTVs will be determined by appropriately qualified consultants who complete the Water Management Plan based on ambient monitoring data.</p> <p>It is requested that these SSTV sit outside the consent and are instead included in the approved Water Management Plan as approved by the Planning Secretary. This provides the</p>	<p>EMM prepared a February 2022 Soil and Water Management plan for Dunmore Lakes Sand Project – Stage 5 to satisfy Schedule 3 Condition 30 of DA 195-8-2004 MOD 2.</p> <p>The February 2022 Soil and Water Management plan was approved by DP&amp;E</p>	<b>Complete and Satisfactory</b>



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			ability for the criteria to be updated in response to changing site conditions and environments without requiring a modification to the consent.		
<b>DSS2/20</b>	Schedule 3, Condition 43 - Rehabilitation Management Plan	Rehabilitation monitoring should be expanded to include measures which could be used to verify the achievement of the completion criteria. These could be incorporated into the next review of the management plans post approval of Stage 5.	Completion criteria of active rehabilitation areas to be included in the next update of the Rehabilitation Management Plan	Arcadis prepared a July 2021 Rehabilitation Management plan for Dunmore Lakes Sand Project to satisfy Schedule 3 Condition 43 of DA 195-8-2004 MOD 2.  The July 2021 Rehabilitation Management plan was approved by DP&E	<b>Complete and Satisfactory</b>
<b>DSS3/20</b>	Schedule 3, Condition 43 - Rehabilitation Management Plan	Woody weeds such as lantana should be treated on an annual basis until effective control is achieved.	Annual works will be completed to remove the low instances of woody weeds observed.	At the site interview Boral's Environmental and Stakeholder Advisor & Environmental Business Partner confirmed woody weeds are treated weekly, Jambaru is the company engaged to monitor and control weeds. Rapid visual assessment is also undertaken and reported.	<b>Complete and Satisfactory</b>

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<b>DSS4/20</b>	Schedule 3, Condition 68 - Waste Management Plan	VENM inspection and verification systems should be upgraded and strengthened to include regular testing of foreign materials.	Boral to update VENM Inspection and Verification protocols. Every load of VENM to be inspected. If any foreign materials are observed, then material is to be rejected and sent back to generator.	Dunmore Lakes Sand Project Waste Management Plan June 2021.  The June 2021 Waste Management Plan was approved by DP&E.  At the site interview Boral's Sand and Soil Manager provided an overview of VENM protocols.	<b>Complete and Satisfactory</b>
<b>DSS5/20</b>	Schedule 3, Condition 50 - Waste Management Plan	Consideration should be given to upgrading the current Long Term Management Strategy to an Environmental Management Strategy.	LTMS will be updated to EMS as requested	Dunmore Sand and Soil Environmental Management Strategy March 2023.	<b>Complete and Satisfactory</b>

## 4. COMPLIANCE WITH DEVELOPMENT CONSENT

An assessment of compliance with the conditions contained within Schedule 2, 3, 4 and 5 of Development Consent has been completed and presented in Table 4-2. The assessment lists the conditions, evidence and information sources considered and an assessment against compliance. Where applicable, opportunities for improvement have been identified.

Modifications of the Development Consent since it was issued in 2004 have been included in Table 4-2. Changes are noted in coloured highlighted as follows:

- **Modification 1 – Blue;**
- **Modification 2 – Red;**
- **Modification 3 – Green.**

### 4.1. SUMMARY OF FINDINGS

A summary of findings is presented in Table 4-1.

Table 4-1: Summary of Findings

Schedule	Audit Finding				Total
	Compliant	Non-compliant	N/A	Not Able to Determine	
2	10	0	9	0	19
3	79	7	13	1	100
4	2	0	7	0	9
5	10	2	2	0	14
<b>Total</b>	<b>101</b>	<b>9</b>	<b>31</b>	<b>1</b>	<b>142</b>

All 9 non-compliances are considered low risk. Where non-compliances are identified the associated risk is noted in Table 4-2.

Table 4-2: Table of Compliance with Development Consent

Number	Details	Evidence Sources/Questions	Audit Findings
<b>Schedule 2: Administrative Conditions</b>			
<b>Obligation to Minimise Harm to the Environment</b>			
1	In addition to meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.	Environmental Controls, Environmental Management Plans.	<b>Compliant</b>
<b>Terms of Approval</b>			
2	The Applicant must carry out the development: a) in compliance with the conditions of this consent; b) in accordance with all written directions of the Planning Secretary; c) generally in accordance with the EIS, EA Mod 1, SEE Mod 3 and EA Mod 2; and d) generally in accordance with the Development Layout in Appendix 1.  Note: The Development Layout Plan is included in Appendix 1.	Consolidated Consent, EIS and EA's, strategies, plans and programs, and site inspection.	<b>Compliant</b>
3	If there is any inconsistency between the documents identified in condition 2(c), the more recent document shall prevail to the extent of the inconsistency. The conditions of this consent shall prevail to the extent of any inconsistency with the documents identified in condition 2(c).	Consolidated Consent, EIS and EA's, strategies, plans and programs, and site inspection.	<b>Compliant</b>
4	The Applicant must comply with any reasonable requirement/s of the Planning Secretary arising from the Department's assessment of: a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent (including any stages of these documents); b) any reviews, reports or audits commissioned by the Department regarding compliance with this consent; and c) the implementation of any actions or measures contained in these documents.	At the site interview Boral confirmed no requests have been made by the Planning Secretary. Correspondence with DP&E.	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Findings
<b>Limits on Approval</b>			
3 (should read 5)	Quarrying operations may be carried out on the site until 15 May 2031.  Notes: <ul style="list-style-type: none"> <li>Under this consent, the Applicant is required to decommission and rehabilitate the site and carry out other requirements in relation to quarrying operations. Consequently, this consent will continue to apply in all respects other than to permit the carrying out of quarrying operations until the rehabilitation of the site and other requirements have been carried out to the required standard.</li> <li>Any ongoing use of the site for processing and blending activities after quarrying operations cease would be the subject of a separate application.</li> </ul>	N/A	N/A
6	The Applicant must not produce or transport more than 800,000 tonnes of product each financial year from the site.	Production, sales and transport records in Annual Reviews, Interview with Production Supervisor.	<b>Compliant</b>  FY 20/21 Produced = 102,366t Transported = 115,006t FY 21/22 Produced = 91,125t Transported = 124,882t FY 22/23 Produced = 177,343t Transported = 151,243t  2023 post 1 July 2023: A review of the available data for FY23/24 revealed the limits have not been exceeded thus far.

Number	Details	Evidence Sources/Questions	Audit Findings
<b>Structural Adequacy</b>			
7	<p>The Applicant must ensure that any new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>Under Part 6 of the EP&amp;A Act, the Applicant is required to obtain construction and occupation certificates for any building works.</li> <li>Part 8 of the EP&amp;A Regulation sets out the detailed requirements for the certification of development.</li> </ul>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed that a turning lane to let trucks safely enter on the public road for Stage 5 has been constructed.</p>	<b>Compliant</b>
<b>Demolition</b>			
8	<p>The Applicant must ensure that all demolition work is carried out in accordance with AS 2601-2001: The Demolition of Structures (Standards Australia, 2001), or its latest version.</p>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner</p>	<p><b>N/A</b> No demolition has occurred.</p>
<b>Protection of Public Infrastructure</b>			
9	<p>Unless the Applicant and the applicable authority agree otherwise, the Applicant must:</p> <p>a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and</p> <p>b) relocate, or pay the full costs associated with relocating any public infrastructure that needs to be relocated as a result of the development.</p> <p>Note: This condition does not apply to any damage to roads caused as a result of general road usage or otherwise addressed by the Road Pavement Dilapidation Report required by condition 53B of Schedule 3 of this consent.</p>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner</p>	<p><b>N/A</b> No public infrastructure has been damaged or relocated.</p>
<b>Operation of Plant and Equipment</b>			



Number	Details	Evidence Sources/Questions	Audit Findings
10	<p>The Applicant must ensure that all plant and equipment at the site, or used in connection with the development, are:</p> <ul style="list-style-type: none"> <li>a) maintained in a proper and efficient condition; and</li> <li>b) operated in a proper and efficient manner.</li> </ul>	<p>Noise Management Plan 2021, Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner, Operations Manager, sighted Boral's Maximo maintenance schedule system, consultation with EPA.</p>	<p><b>Compliant</b></p>
<b>Notification of Commencement</b>			
11	<p>The Department must be notified in writing of the date of commencement of any of the following phases of the development, at least two weeks before that date:</p> <ul style="list-style-type: none"> <li>a) construction activities associated with Modification 2;</li> <li>b) quarrying operations in each of Stages 5A and 5B;</li> <li>c) cessation of quarrying operations (i.e. quarry closure); and</li> <li>d) any period of suspension of quarrying operations (i.e. care and maintenance).</li> </ul>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed notification for construction activities, quarry operations in both 5A and 5B was provided and copies of relevant letters were sighted. No cessation of quarry operations or suspension has occurred.</p>	<p><b>Compliant</b></p>
<b>Staging, Combining and Updating Strategies, Plans or Programs</b>			
12	<p>With the approval of the Planning Secretary, the Applicant may:</p> <ul style="list-style-type: none"> <li>a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to</li> </ul>	<p>N/A – Interview with Environmental and Stakeholder Advisor &amp; Environmental Business</p>	<p><b>N/A</b></p>

Number	Details	Evidence Sources/Questions	Audit Findings
	<p>which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);</p> <p>b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined);</p> <p>c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development); and</p> <p>d) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required by an adjoining quarrying consent or approval, in common ownership or management.</p>	<p>Partner confirmed that a stage approach is under consideration to consolidate water management on site. This staged approach has not been finalised.</p>	
13	<p>If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this consent if those requirements are not applicable to the particular stage.</p>	N/A	N/A
14	<p>If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.</p>	N/A	N/A
<b>Application of Existing Strategies, Plans or Programs</b>			
15	<p>The Applicant must continue to apply existing management strategies, plans or monitoring programs required under this consent prior to the approval of Modification 2, until the approval of a similar plan, strategy or program following the approval of Modification 2.</p>	<p>Environmental Controls, Environmental Management Plans</p>	Compliant
<b>Compliance</b>			
16	<p>The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.</p>	<p>Interview with Quarry Manager and Environmental Co-ordinator, review of Boral's RAPID induction system and induction presentation.</p>	Compliant

Number	Details	Evidence Sources/Questions	Audit Findings
<b>Applicability of Guidelines</b>			
17	References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of inclusion (or later update) in the condition.	N/A	N/A
18	However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, in respect of ongoing monitoring and management obligations, agree to or require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.	N/A	N/A
<b>Crown Land</b>			
19	The Applicant must consult with DPIE – Crown Lands prior to undertaking any development on Crown Land or Crown Roads.	N/A – Interview with Environmental and Stakeholder Advisor & Environmental Business Partner confirmed no Crown Land or Crown Roads in project area.	N/A
<b>Schedule 3: Specific Environmental Conditions</b>			
<b>General Extraction and Processing Provisions</b>			
<b>Identification of Boundaries</b>			
1	<p>Within 6 months of the date of this consent and prior to the commencement of extraction operations in each of Stage 5A and Stage 5B, <b>the Applicant must:</b></p> <p>a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction for Stages 2, 3, 4, 5A and 5B (as set out conceptually in Appendix 1 and as amended by the conditions of this consent);</p> <p>b) submit a survey plan of these boundaries and their GPS coordinates to the Planning Secretary; and</p> <p>c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits.</p>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner, sighted correspondence with DP&amp;E, Survey Plan, Site Inspection.</p>	<b>Compliant</b>
<b>Stages 2 – 4 Extraction Areas</b>			



Number	Details	Evidence Sources/Questions	Audit Findings
2	<b>The Applicant must</b> not undertake extraction within 3 metres of the project site boundary for <b>Stages 2 - 4</b> . Batter slopes from this extraction limit <b>must</b> be no steeper than 1:3 (V:H).	Site Inspection and site aerial photography provided by Boral.	<b>Compliant</b>
3	<b>The Applicant must</b> not undertake any stockpiling of material in the area marked 'Potential Future Stockpiling Area' on Figure 2.2 of the EIS.	NearMap aerial image review.	<b>Compliant</b>
<b>Stage 4 – Tabbita Road Corridor</b>			
4	<b>The Applicant must</b> not undertake any extraction in Stage 4 without the prior approval of the <b>Planning Secretary</b> . An application to undertake extraction in Stage 4 must be accompanied by an extraction management plan that <b>must</b> : a) detail the proposed realignment and rehabilitation of Tabbita Road and associated infrastructure; b) assess the environmental impacts of the proposed realignment; and c) include appropriate agreements with affected parties, to the satisfaction of the <b>Planning Secretary</b> .	Interview with Environmental and Stakeholder Advisor & Environmental Business Partner confirmed Stage 4 extraction has not commenced. Extraction moved into the Stage 5 area.	<b>N/A</b>
<b>Western, Northern and Eastern Tributaries</b>			
5	Note: The Applicant is required to obtain a Controlled Activity Approval from <b>DPIE Water</b> under the Water Management Act 2000 prior to undertaking any works within 40 metres of Rocklow Creek or the Western, Northern and Eastern Tributaries, or any water feature connected to these protected waters.  <b>The Applicant must</b> not undertake extraction within 3 metres of the bank of the Eastern Tributary. Batter slopes from this extraction limit <b>must</b> be no steeper than 1:3 (V:H).	Annual Review, interview with Environmental and Stakeholder Advisor & Environmental Business Partner, site inspection and aerial photography of site provided by Boral and accessed via NearMap.  Controlled Activity Approval granted in	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Findings
		2019 (10CX123242;10 ERM2010/1116) for mining and redirection of Rocklow Creek, and 2018 (10CX122266) for extraction within 10m of Rocklow Creek.	
6	<p>The Applicant must maintain the integrity of the Northern and Western Tributaries for as long as practicable. In this regard, the Applicant must only extract sand within 3 metres of the bank of the tributaries in accordance with an approved Riparian Area Management Plan. Batter slopes from this extraction limit must be no steeper than 1:2 (V:H).</p>	Interview with Environmental and Stakeholder Advisor & Environmental Business Partner, site inspection and aerial photography of site provided by Boral.	Compliant
Southern, North-eastern and North-western Wetlands			
7	<p>The Applicant must not undertake extraction within 10 metres of the bank of the southern or north-eastern wetlands. Batter slopes from this extraction limit must be no steeper than 1:2 (V:H).</p>	Site Inspection and NearMap aerial image review	Compliant
8	<p>The Applicant must commission a suitably qualified ecologist, whose appointment has been endorsed by the Planning Secretary, to mark out the extraction limit to the southern and north-eastern wetlands.</p> <p>Note: The southern and north-eastern wetlands are defined as the area that constitutes Freshwater Wetlands on Coastal Floodplains, an endangered ecological community under the former Threatened Species Conservation Act 1995.</p>	The 2020 IEA stated Dr David Robertson of Cumberland Ecology marked out the extraction limits from the wetland's banks during the Flora, Fauna and Rehabilitation Management Plan which was submitted to DP&E in June 2006. The	Compliant



Number	Details	Evidence Sources/Questions	Audit Findings
9	<p>The Applicant must ensure that extraction within 40m of the southern, north-eastern and north-western wetlands occurs towards the end of dredging when the dredge pond water volume is maximised, and in accordance with an approved Riparian Area Management Plan. The plan must include an assessment by a suitably qualified hydrogeologist justifying the extraction limit referred to in condition 7, based on data obtained from the site.</p>	<p>amended survey plan was submitted on 5/03/2007.</p> <p>Site Inspection – extraction works complete.</p>	<p><b>Compliant</b></p>
<b>Rocklow Creek Realignment</b>			
10	<p>Prior to the commencement of extraction in Sub-Stage 3C1 (see Appendix 1), the Applicant must complete the realignment and rehabilitation of Rocklow Creek, to the satisfaction of the Planning Secretary. The realignment must be undertaken in accordance with an approved Riparian Area Management Plan (see condition 45). The realigned channel must be designed so as to safely convey, without bed or bank erosion, the 1 in 20 year ARI peak flow.</p>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed no re-alignment work has occurred and no immediate plans for extraction of Sub-Stage 3C1. Site inspection and aerial photography confirmed compliance.</p>	<p><b>Compliant</b></p>
11	<p>The Applicant must not undertake extraction within 3 metres of the bank of the realigned Rocklow Creek. Batter slopes from this extraction limit must be no steeper than 1:2 (V:H).</p>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed no re-alignment work has occurred. Site inspection.</p>	<p><b>Compliant</b></p>

Number	Details	Evidence Sources/Questions	Audit Findings
12	The Applicant must provide for the ultimate redirection of the realigned Rocklow creek into the lake in Stage 3, unless otherwise approved by the Planning Secretary. The redirection must be undertaken in accordance with an approved Riparian Area Management Plan.	N/A	N/A
<b>Stage 5 Extraction Areas</b>			
12A	The Applicant must not undertake extraction within 3 metres of the project boundary for Stage 5A adjacent to Riverside Drive or the project boundary for Stage 5B adjacent to the private property at 79 Fig Hill Lane.	Site Inspection and aerial photography using NearMap (image date 21 Oct 2023)	<b>Compliant</b>
12B	The Applicant is not permitted to undertake any vegetation clearance, construction or extraction activities within lands zoned as E3 under the Shellharbour Local Environment Plan 2013. In this regard, the Applicant must adjust its final flood bund design and extraction footprint for Stage 5B and the location of ancillary infrastructure (including water management infrastructure) to stand off these lands	Site Inspection and aerial photography using NearMap (image date 21 Oct 2023)	<b>Compliant</b> <b>Opportunity for improvement [DSS1/23]:</b> Request from DP&E an administrative change to Consolidated Consent to update to current zoning to C3, as well as remove 'Error! Reference source not found.' and condition misnumbering throughout consent.
<b>Noise</b>			
<b>Operational Noise Criteria</b>			
13	Except for the carrying out of approved construction works, the Applicant must ensure that the noise generated by the development does not exceed the criteria specified in Table 1.  <b>Table 1:</b> Noise impact assessment criteria dB(A)	Noise Management Plan 2021, Annual Noise Monitoring Assessment, Annual Reviews,	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Findings																																								
	<table border="1"> <thead> <tr> <th>Residential Location</th> <th>Shoulder L<sub>Aeq</sub> (15 mins)</th> <th>Day L<sub>Aeq</sub> (15 mins)</th> <th>Evening L<sub>Aeq</sub> (15 mins)</th> <th>Night L<sub>Aeq</sub> (15 mins)</th> </tr> </thead> <tbody> <tr> <td>Dunmore Village residences – 31 Shellharbour Road</td> <td>47</td> <td>49</td> <td>44</td> <td>41</td> </tr> <tr> <td>R20</td> <td>47</td> <td>49</td> <td>44</td> <td>38</td> </tr> <tr> <td>R3, R11, R12, R13, R14, R15, R16, R17, R18, 79 Fig Hill Lane</td> <td>48</td> <td>48</td> <td>43</td> <td>38</td> </tr> <tr> <td>R19</td> <td>46</td> <td>47</td> <td>43</td> <td>38</td> </tr> <tr> <td>R4, R5, R6, R7, R8, R9, R10</td> <td>43</td> <td>47</td> <td>43</td> <td>38</td> </tr> <tr> <td>Renton (183 James Road Dunmore)</td> <td>46</td> <td>46</td> <td>43</td> <td>37</td> </tr> <tr> <td>All other residences</td> <td>35</td> <td>40</td> <td>35</td> <td>35</td> </tr> </tbody> </table>	Residential Location	Shoulder L <sub>Aeq</sub> (15 mins)	Day L <sub>Aeq</sub> (15 mins)	Evening L <sub>Aeq</sub> (15 mins)	Night L <sub>Aeq</sub> (15 mins)	Dunmore Village residences – 31 Shellharbour Road	47	49	44	41	R20	47	49	44	38	R3, R11, R12, R13, R14, R15, R16, R17, R18, 79 Fig Hill Lane	48	48	43	38	R19	46	47	43	38	R4, R5, R6, R7, R8, R9, R10	43	47	43	38	Renton (183 James Road Dunmore)	46	46	43	37	All other residences	35	40	35	35	interview with Environmental and Stakeholder Advisor & Environmental Business Partner.	
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13A	Noise generated by the development must be monitored and measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Noise Policy for Industry (EPA, 2017).	Noise Management Plan 2021, Annual Reviews, interview with Environmental and Stakeholder Advisor & Environmental Business Partner.	<b>Compliant</b>																																								
13B	The noise criteria in Table 1 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.	N/A - interview with Environmental and Stakeholder Advisor & Environmental Business Partner confirmed no agreements.	<b>N/A</b>																																								
<b>Operating Hours</b>																																											
14	<sup>1</sup> The Applicant must comply with the operating hours in Table 2:  Table 2: Operating Hours	Noise Management Plan 2021, Review QMS system data, interview with Quarry Manager	<b>Compliant</b>																																								



Number	Details	Evidence Sources/Questions	Audit Findings
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Activity	Day	Time
Dredging and processing	Monday – Saturday	6:00am to 6:00pm
	Sunday and Public Holidays	8:00am to 4:00pm
Excavator extraction	Monday – Saturday	6:30am to 6:00pm
	Sunday and Public Holidays	Nil
Delivery, distribution and maintenance	Monday – Friday	5:00am to Midnight
	Saturday	6:00am to 6:00pm
	Sunday and Public Holidays	8:00am to 4:00pm
Delivery and distribution via Shellharbour Road and Riverside Drive	Monday – Friday	7:00am to 10:00pm
	Saturday	7:00am to 6:00pm
	Sunday and Public Holidays	8:00am to 4:00pm
Maintenance (if inaudible at neighbouring residences)	Anytime	Anytime

and Environmental and Stakeholder Advisor & Environmental Business Partner, consultation with CCC and Council.

**15** <sup>2</sup>The following activities may be carried out at the premises outside the hours specified in Table 2:  
 a) the delivery or dispatch of materials as requested by Police or other public authorities for safety reasons; and  
 b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm. In such circumstances the Applicant must notify the Department and affected residents prior to undertaking the works, or within a reasonable period in the case of emergency.

N/A N/A

<sup>1</sup> Incorporates EPA GTA  
<sup>2</sup> Incorporates EPA GTA

**Construction Hours**

**15A** Approved construction works must be undertaken during standard construction hours (7 am to 6 pm, Monday to Friday and 8 am to 1 pm on Saturdays), unless the Planning Secretary agrees otherwise.

Noise Management Plan 2021, Review QMS system data, interview with Quarry Manager and Environmental and Stakeholder Advisor & **Compliant**



Number	Details	Evidence Sources/Questions	Audit Findings
Environmental Business Partner.			
<b>Noise Operating Conditions</b>			
16	<p>The Applicant must:</p> <ul style="list-style-type: none"> <li>a) take all reasonable steps to minimise noise from construction and operational activities, including low frequency noise and other audible characteristics, as well as road noise associated with the development;</li> <li>b) implement reasonable and feasible noise attenuation measures on all plant and equipment that will operate in noise sensitive areas;</li> <li>c) operate a noise management system to guide day to day planning of quarrying operations and implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent;</li> <li>d) take all reasonable steps to minimise the noise impacts of the development during noise enhancing meteorological conditions;</li> <li>e) carry out regular attended noise monitoring to determine whether the development is complying with the relevant conditions of this consent; and</li> <li>f) regularly assess the noise monitoring data and modify or stop operations on the site to ensure compliance with the relevant conditions of this consent.</li> </ul>	<p>Noise Management Plan 2021, Annual Reviews, community complaints database, site inspection of monitoring locations, interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner.</p>	<b>Compliant</b>
<b>Noise Management Plan</b>			
17	<p>The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;</li> <li>b) describe the noise management system and measures to be implemented to ensure: <ul style="list-style-type: none"> <li>• compliance with the noise criteria and operating conditions in this consent;</li> <li>• leading practice management is being employed;</li> <li>• noise impacts of the development are minimised during noise-enhancing meteorological conditions;</li> </ul> </li> <li>c) include a protocol for distinguishing noise emissions of the development from other nearby or neighbouring developments; and</li> </ul>	<p>Noise Management Plan 2021 Noise Management Plan approved and addresses (a) – (d) of the condition.</p>	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Findings
	d) include a monitoring program that: <ul style="list-style-type: none"> <li>is capable of evaluating the performance of the development against the construction and operational noise criteria;</li> <li>monitors noise at the nearest and/or most affected residences or other representative monitoring locations set out in the Noise Management Plan;</li> <li>adequately supports the noise management system; and</li> <li>includes a protocol for identifying any noise-related exceedance, incident or noncompliance and notifying the Department and relevant stakeholders of any such event.</li> </ul>		
18	The Applicant must implement the Noise Management Plan as approved by the Planning Secretary.	Noise Management Plan 2021 and interview with Environmental and Stakeholder Advisor & Environmental Business Partner	<b>Compliant</b>

**Air Quality**

**Air Quality Criteria**

19 The Applicant must ensure that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 3 at any residence on privately-owned land.

Table 3: Air quality criteria

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a</sup> 25 µg/m <sup>3</sup>
	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>
Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	<sup>a</sup> 8 µg/m <sup>3</sup>
	24 hour	<sup>c</sup> 25 µg/m <sup>3</sup>
Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 µg/m <sup>3</sup>

Air Quality Monitoring Program 2017, Air Quality Management Plan 2021, Annual Reviews  
 Air Quality Monitoring Program states the project is using 'portable real-time "DustTrak" and High Volume Air Sampler (HVAS) (Section 6).

**Non-Compliant**  
**Low Risk**  
 The relevant criteria are included in the Air Quality Management Plan 2021 but not the Air Quality Monitoring Program 2017 or in the Annual Reviews. No PM2.5 reported in Annual Reviews. Incorrect Annual PM10





Number	Details	Evidence Sources/Questions	Audit Findings
	<p>Notes:</p> <p><sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).</p> <p><sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own).</p> <p><sup>c</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Planning Secretary.</p>	<p>The Annual Review (Section 4.2 states 'deposited dust gauges and HVAS'.</p> <p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner advised Boral is currently in discussion with EPA to amend the EPL to address real time monitoring and relevant conditions.</p>	<p>values used (30 rather than 25 ug/m3) in reporting for Annual Review</p> <p><b>Opportunity for improvement</b>  <b>[DSS2/23]:</b> Update Air Quality Monitoring Program 2017 with correct criteria, or remove from website if it is superseded by the Air Quality Monitoring in Section 6 of the Air Quality Management Plan 2021.</p> <p><b>Opportunity for improvement</b>  <b>[DSS3/23]:</b> Monitor and report against all current condition of consent Air Quality Criteria in the Annual Reviews.</p>
20	The air quality criteria in Table 3 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or infrastructure to exceed the air quality criteria, and the Applicant has advised the Department in writing of the terms of this agreement.	N/A – no agreements in place.	N/A

**Air Quality Operating Conditions**



Number	Details	Evidence Sources/Questions	Audit Findings
20A	<p>The Applicant must:</p> <p>a) take all reasonable steps to:</p> <ul style="list-style-type: none"> <li>• minimise odour, fume and particulate matter (including PM10 and PM2.5) emissions of the development;</li> <li>• minimise visible off-site air pollution generated by the development; and</li> <li>• minimise the extent of potential dust generating surfaces exposed on the site at any given point in time;</li> </ul> <p>b) operate an air quality management system to guide the day to day planning of quarrying operations and implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;</p> <p>c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events;</p> <p>d) carry out regular air quality monitoring to determine whether the development is complying with the relevant conditions in this consent; and</p> <p>e) regularly assess meteorological and air quality monitoring data and relocate, modify or stop operations on the site to ensure compliance with the relevant conditions of this consent.</p>	Air Quality Management Plan 2021	<p><b>Non-Compliant</b></p> <p><b>Low Risk</b></p> <p>The relevant criteria are included in the Air Quality Management Plan 2021 but not the Air Quality Monitoring Program 2017 or in the Annual Reviews. No evaluation for PM2.5 is evident.</p>
<b>Air Quality Management Plan</b>			
20B	<p>The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:</p> <p>a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;</p> <p>b) describe the measures to be implemented to ensure:</p> <ul style="list-style-type: none"> <li>• compliance with the air quality criteria and operating conditions in this consent;</li> <li>• leading practice management is being employed (including in respect of minimisation of greenhouse gas emissions from the site); and</li> <li>• air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;</li> </ul> <p>c) describe the air quality management system; and</p> <p>d) include an air quality monitoring program that:</p>	Air Quality Management Plan 2021	<p><b>Compliant</b></p> <p>Air Quality Management Plan approved and addresses (a) – (d) of the condition.</p>



Number	Details	Evidence Sources/Questions	Audit Findings
	<ul style="list-style-type: none"> <li>is capable of evaluating the performance of the development against the air quality criteria;</li> <li>adequately supports the air quality management system; and</li> <li>includes a protocol for identifying any air quality-related exceedance, incident or noncompliance and notifying the Department and relevant stakeholders of any such event.</li> </ul>		
20C	The Applicant must implement the Air Quality Management Plan as approved by the Planning Secretary	Air Quality Management Plan 2021	<p><b>Non-Compliant</b> <b>Low Risk</b></p> <p>Section 8 of the Air Quality Management Plan provides implementation details, but the old criteria are being reported on in the Annual Review.</p>
<b>Odour</b>			
21	<p><sup>3</sup> The Applicant must not cause or permit the emission of offensive odour from the site.</p> <p>Note: 'Offensive odour' is defined in the Protection of the Environment Operations Act 1997.</p> <p><sup>3</sup>Incorporates EPA GTA</p>	Air Quality Management Plan 2021, Site inspection, interview with Environmental and Stakeholder Advisor & Environmental Business Partner.	<b>Compliant</b>
<b>Surface and Ground Water</b>			
<b>Water Supply</b>			
21A	The Applicant must ensure that it has sufficient water for all stages of the development prior to the take of water occurring, and if necessary, adjust the scale of the development to match its available water supply.	Site inspection, interview with Environmental and	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Findings
21B	<p>The Applicant must report on water extracted from the site each year (direct and indirect) in the Annual Review, including water taken under each water licence.</p> <p>Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain all necessary water licences for the development.</p>	<p>Stakeholder Advisor &amp; Environmental Business Partner.</p> <p>Annual Reviews Water Balance calculations do not correspond in some annual reviews and reporting discrepancies for some years. AR 2019-2020 Production: Listed in Water use Section 4.5 = 220,995 – listed in Sect 2.5 = 220995 Water use 8%: 20.62ML listed but 8% = 17.7ML plus 98 days listed for as rain = 27ML water use for dust suppression Stated Use: 20.62ML + 27ML = 47.62ML AR 2020-2021 Production: Listed in Water use Section 4.5 = 220,995 – listed in Sect 2.5 = 102,366 Water use 8%: 20.62ML listed but 8% = 8.2ML and listed 98 days listed</p>	<p><b>Compliant</b></p> <p><b>Opportunity for improvement [DSS4/23]:</b> Water balance calculations to be checked for future Annual Review as reporting discrepancies noted in Annual Review 2020-2021 and Annual Review 2022-2023.</p> <p><b>Opportunity for improvement [DSS5/23]:</b> Water balance calculations use annual production amounts for water loss of site due to sale, this calculation should use transport data of sales as this is more accurate of sand related water loss due to sales and movement of materials offsite.</p>



Number	Details	Evidence Sources/Questions	Audit Findings
		<p>for as rain = 27ML water use for dust suppression Stated Use: 20.62ML + 27ML = 47.62ML AR 2021-2022 Production: Listed in Water use Section 4.5 = 91,125 – listed in Sect 2.5 = 91,125 Water use 8%: 8.5ML but 8% = 7.3ML and 16ML water use for dust suppression Stated Use: 8.5ML + 16ML = 24.5ML AR 2022-2023 Production: 177,343 in section 2.5 &amp; 4.5 Water use 8%: 20.62ML but 8% = 14.2ML and listed 124 days listed for as rain = 20ML water use for dust suppression Stated Use: 27ML + 20.62ML = 47.62ML listed even though different quantities listed.</p>	

Pollution of Waters



Number	Details	Evidence Sources/Questions	Audit Findings									
22	<p>Except as may be expressly provided by an EPL, the Applicant must comply with section 120 of the Protection of the Environment Operations Act 1997 during the carrying out of the development.</p>	Annual Reviews	<p><b>Non-compliant</b> <b>Low Risk</b></p> <p>An exceedance of the TSS limit of 50 was recorded in February 2023 at surface water sampling site DW20-b during an uncontrolled discharge.</p>									
<b>Water Discharge Limit</b>												
23	<p>Except as may be expressly provided by an EPL, the Applicant must ensure that the discharges from any licenced discharge point/s do not cause additional exceedances of the criteria in Table 4:</p> <p>Table 4: Water Discharge Pollution Limits</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Unit of Measure</th> <th>100 Percentile Concentration Limit</th> </tr> </thead> <tbody> <tr> <td>Total Suspended Solids</td> <td>mg/L</td> <td>50</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>± 1.0</td> </tr> </tbody> </table>	Pollutant	Unit of Measure	100 Percentile Concentration Limit	Total Suspended Solids	mg/L	50	pH	pH	± 1.0	Annual Reviews	<p><b>Non-compliant</b> <b>Low Risk</b></p> <p>An exceedance of the TSS limit of 50 was recorded in February 2023 at surface water sampling site DW20-b during an uncontrolled discharge.</p>
Pollutant	Unit of Measure	100 Percentile Concentration Limit										
Total Suspended Solids	mg/L	50										
pH	pH	± 1.0										
<b>Water Quality Objectives</b>												
24	<p>The Applicant must ensure that water quality in the dredge ponds and in groundwater comply with the water quality objectives in Table 5, or other such level as approved by the Planning Secretary:</p> <p>Table 5: Water Quality Objectives</p>	<p>Non-compliance in AR 2021-2022 for water quality objectives. Additional water quality objectives were noted as exceedances in AR 2020-2021 and AR 2022-2023. A new Water and Soil Management Plan was prepared for Stage 5</p>	<p><b>Non-compliant</b> <b>Low Risk</b></p> <p>While the non-compliance risk is low, the matter of operating within water quality objectives is a consistent theme. It is noted that the EPL was modified in June 2023</p>									



Number	Details	Evidence Sources/Questions	Audit Findings
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Pollutant	Unit of Measure	Water Quality Objective
Turbidity	NTU	5-20
pH	pH	6.5 – 8.5
Salinity	µS/cm	<1,500
Dissolved oxygen	mg/L	>6
Total phosphorus	µg/L	5-50
Total nitrogen	µg/L	100-500
Chlorophyll-a	µg/L	2-10
Faecal coliforms	Median No./100mL	<1000
Enterococci	Median No./100mL	<230
Algae and blue-green algae	No.cells/mL	<15,000
Sodium	mg/L	400
Potassium ion	mg/L	50
Magnesium ion	mg/L	50
Chloride ion	mg/L	300
Sulphate ion	mg/L	250
Bicarbonate ion	mg/L	750
Soluble Iron ion	mg/L	6
Ammonium ion	mg/L	20

area under Mod 2 and is to read in conjunction with the previous WMP for stages 2,3 and 4.

to reflect agreed monitoring thresholds for ongoing water quality.

Notes:

- The objectives for dissolved oxygen, turbidity and algae are relevant to surface water only;
- The Department acknowledges that short term exceedances of these objectives may occur during natural events such as heavy rainfall or tidal saline water inflow.

#### Stormwater Management

25	<p><sup>4</sup> The Applicant must ensure that any pond subject to dredging or backfilling, or containing turbid water due to recent dredging or backfilling, must be maintained and operated to prevent discharges of any turbid water (as defined in Tables 4 and 5) from these ponds.</p> <p><sup>4</sup>Incorporates EPA GTA</p>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner</p>	<p><b>Compliant</b></p>
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Number	Details	Evidence Sources/Questions	Audit Findings
26	<p><sup>5</sup> The Applicant must cease backfilling activities not less than 12 hours prior to the commencement of overflow from any dredge pond. No backfilling must occur when the dredge ponds are overflowing.</p> <p><sup>5</sup>Incorporates EPA GTA</p>	Interview with Environmental and Stakeholder Advisor & Environmental Business Partner	Compliant
<b>Flood Management</b>			
27	The Applicant must ensure that the flood storage capacity of the site is no less than the pre-existing flood storage capacity at all stages of the development, unless otherwise approved in writing by the Planning Secretary. Details of the available flood storage capacity must be reported in the Annual Review.	Annual Reviews	Compliant
28	<p><sup>6</sup>The access road entrance off Tabbita Road, processing and stockpile area, and the fines return pond(s) must be constructed and maintained so as to prevent inundation by floodwaters caused by the 1 in 100 year ARI flood level. Prior to the commissioning of the processing area, the Applicant must provide certification to the Planning Secretary that this condition has been complied with.</p> <p><sup>6</sup>Incorporates EPA GTA</p>	Interview with Environmental and Stakeholder Advisor & Environmental Business Partner	Compliant
29	Following the cessation of dredging and backfilling operations, the Applicant must commission a suitably qualified hydrologist to define the flood-related limits of the final landform. The flood study must be undertaken in consultation with the Department and Shellharbour Council, and to the satisfaction of the Planning Secretary.	N/A – dredging and backfilling operations have not ceased.	N/A
<b>Stage 5 Flood Mitigation</b>			
29A	Prior to undertaking any development in Stage 5A, the Applicant must provide the Planning Secretary with the detailed design of the Stage 5A flood mitigation bunds which demonstrates that the bunds can prevent inundation of the Stage 5A pond by floodwaters associated with the 1 in 100 year ARI flood level.	Interview with Environmental and Stakeholder Advisor & Environmental Business Partner	Compliant
29B	Prior to undertaking any development in Stage 5B, the Applicant must provide the Planning Secretary with the detailed design of the Stage 5B flood mitigation bunds which demonstrates	Interview with Environmental and	Compliant



Number	Details	Evidence Sources/Questions	Audit Findings
	<p>that the bunds can prevent inundation of the Stage 5B pond and carparking area by floodwaters associated with the probable maximum flood event. Any increase in the height of the bunds required to achieve this outcome must be accompanied by an appropriate increase in width to ensure the stability and visual aesthetics of the bunds in the landscape, to the satisfaction of the Secretary.</p>	<p>Stakeholder Advisor &amp; Environmental Business Partner</p>	
<p><b>29C</b></p>	<p>The Applicant must retain and maintain the flood bunds around the Stage 5B area to prevent interactions with the probable maximum flood, unless otherwise agreed in writing by the Planning Secretary.</p> <p>Upon receiving a written request from the Applicant seeking to remove the bunds, the Planning Secretary will determine whether the flood bunds should be removed and the Stage 5B pond rehabilitated and integrated into the Minnamurra River floodplain. If the water quality in the pond meets relevant ANZECC</p> <p>Guidelines, water quality standards imposed under any EPL and does not represent a material environmental risk to the Minnamurra River floodplain, the Planning Secretary will provide a written approval stipulating the timing and rehabilitation requirements associated with the removal of the bunds.</p> <p>Alternatively, with the written approval of the Planning Secretary, the Applicant may satisfy its maintenance obligations under this condition through the establishment of a suitable funding agreement with an appropriate public authority. This public authority would then be responsible for the oversight and carriage of these in perpetuity works.</p>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner, site inspection.</p>	<p><b>Compliant</b></p>
<p><b>29D</b></p>	<p>The Applicant must undertake regular monitoring of the stability of flood bunds throughout the extraction, rehabilitation and closure phases of the Stage 5 quarry operations.</p>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner, site inspection.</p>	<p><b>Compliant</b></p>

**Soil and Water Management Plan**



Number	Details	Evidence Sources/Questions	Audit Findings
30	<p>The Applicant must prepare a Soil and Water Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:</p> <ul style="list-style-type: none"><li>a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;</li><li>b) be prepared in consultation with EPA and DPIE Water; and</li><li>c) include a:<ul style="list-style-type: none"><li>i <b>Site Water Balance</b> that includes details of:<ul style="list-style-type: none"><li>• predicted annual inflows to and outflows from the site;</li><li>• sources and security of water supply for the life of the development (including authorised entitlements and licences);</li><li>• water storage capacity, use and management on the site;</li><li>• licenced discharges points and limits; and reporting of annual water extraction and maximum instantaneous pumping rates to the Department; and</li><li>• procedures for the annual preparation of an updated site water balance; and</li></ul></li><li>ii Erosion and Sediment Control Plan that:<ul style="list-style-type: none"><li>• is consistent with the requirements of Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book (Landcom, 2004) and Volume 2E: Mines and Quarries (DECC, 2008);</li><li>• identifies activities that could cause soil erosion, generate sediment or affect flooding;</li><li>• includes a program to review the adequacy of existing flood protection works;</li><li>• describes measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage flood risk;</li><li>• describes the location, function, and capacity of erosion and sediment control structures and flood management structures; and</li><li>• describes what measures would be implemented to maintain (or if necessary, decommission) the structures over time;</li></ul></li><li>iii Surface Water Management Plan, that includes:</li></ul></li></ul>	Soil and Water Management Plan 2022	<b>Compliant</b> Soil and Water Management Plan approved and addresses (a) – (c) of the condition.



Number	Details	Evidence Sources/Questions	Audit Findings
	<ul style="list-style-type: none"><li>• detailed baseline data on surface water flows and quality in watercourses, water bodies, wetlands and/or fish habitat that could potentially be affected by the development;</li><li>• a detailed description of the surface water management system on the site, including the:<ul style="list-style-type: none"><li>- clean water diversion system;</li><li>- erosion and sediment controls;</li><li>- dirty water management system; and</li><li>- water storages;</li></ul></li><li>• a program to monitor and evaluate:<ul style="list-style-type: none"><li>- any surface water discharges;</li><li>- bank and bed stability;</li><li>- the effectiveness of the water management system;</li><li>- impacts on water supply for other water users; and</li><li>- surface water flows and quality in watercourses, waterbodies, wetlands and/or fish habitats that could potentially be impacted by the development;</li></ul></li><li>• surface water impact assessment criteria and performance measures, including trigger levels for investigating and responding to potentially adverse impacts; and</li><li>• a protocol for identifying and investigating any exceedances of the surface water impact assessment criteria and for notifying the Department and relevant stakeholders of these events;</li></ul> <p>iv Groundwater Management Plan that includes</p> <ul style="list-style-type: none"><li>• detailed baseline data of groundwater levels, flows and quality for groundwater resources and groundwater dependent ecosystems potentially impacted by the development;</li><li>• a detailed description of the groundwater management system;</li><li>• a program to monitor and evaluate:<ul style="list-style-type: none"><li>- water loss/seepage from water storages into the groundwater system, including from any final void;</li><li>- groundwater inflows, outflows and storage volumes, to inform the Site Water Balance;</li></ul></li></ul>		



Number	Details	Evidence Sources/Questions	Audit Findings
	<ul style="list-style-type: none"> <li>- impacts on groundwater supply for other water users;</li> <li>- impacts on groundwater dependent ecosystems;</li> <li>- the hydrogeological setting of any nearby alluvial aquifers and the likelihood of any indirect impacts from the development; and</li> <li>- the effectiveness of the groundwater management system;</li> <li>• groundwater impact assessment criteria and performance measures, including trigger levels for investigating and responding to potentially adverse groundwater impacts (or trends) associated with the development on regional and local aquifers and/or the groundwater supply for other water users such as licensed privately owned groundwater bores;</li> <li>• a protocol for identifying and investigating any exceedances of the groundwater performance criteria and for notifying the Department and relevant stakeholders of these events; and</li> <li>• a protocol to obtain appropriate water licence(s) to cover the volume of any unforeseen groundwater inflows into the extraction areas.</li> </ul>		
31	The Applicant must implement the Soil and Water Management Plan approved by the Planning Secretary	Soil and Water Management Plan 2022	<b>Compliant</b>
32	The Applicant must not commence extraction in Stage 5 until the Soil and Water Management Plan is approved by the Planning Secretary.	Interview with Environmental and Stakeholder Advisor & Environmental Business Partner	<b>Compliant</b>
<b>Stage 5 Acid Sulfate Soils Management</b>			
33	<p>Prior to commencing extraction in Stage 5, the Applicant must prepare an Acid Sulfate Soils Management Plan for Stage 5 operations, to the satisfaction of the Planning Secretary. The plan must:</p> <ul style="list-style-type: none"> <li>a) be prepared in consultation with EPA and by a suitably qualified person whose appointment has been approved by the Planning Secretary;</li> <li>b) describe the measures that would be implemented to limit the risk of acid sulfate soils being mobilised during Stage 5 operations;</li> </ul>	Acid Sulfate Soils Management Plan 2021	<b>Compliant</b>

Number	Details	Evidence Sources/Questions	Audit Findings
	<p>c) describe the measures that would be implemented to limit the risk of acid sulphate soils being imported with the VENM; and</p> <p>d) include a Trigger Action Response Plan with a hierarchy of actions to avoid, mitigate and manage acid sulfate soils impacts.</p>		
34	Deleted	N/A	N/A
35	Deleted	N/A	N/A
<b>Meteorological Monitoring</b>			
36	<p>Prior to the commencement of construction within the Stage 5 areas and for the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in close proximity to the site that:</p> <p>a) complies with the requirements in the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007); and</p> <p>b) is capable of measuring meteorological conditions in accordance with the NSW Noise Policy for Industry (EPA, 2017), unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.</p>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner.</p>	<b>Compliant</b>
<b>Biodiversity</b>			
<b>Endangered Ecological Community Compensatory Habitat</b>			
37	<p>The Applicant must establish, conserve and maintain at least:</p> <p>a) 6 ha of Freshwater Wetlands on Coastal Floodplains (which may include areas of associated wetland pondage); and</p> <p>b) 3 ha of Swamp Oak Floodplain Forest;</p> <p>in rehabilitation and visual screening plantings on the site, in a manner that integrates the compensatory habitats with existing similar habitats on and near the site.</p>	<p>Annual Review, Boral Website, Flora and Fauna Management Plan – Appendix D: Compensatory Habitat Management Plan</p> <p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner.</p>	<p><b>Compliant</b></p> <p>In progress. Annual Review confirms that the final landform will exceed the required Compensatory Habitat Areas. Website details progress of rehabilitation.</p>
<b>Stage 5 Biodiversity Offsets</b>			



Number	Details	Evidence Sources/Questions	Audit Findings														
37A	<p>Prior to any clearing of vegetation in Stage 5B, or other timeframe agreed by the Planning Secretary, the Applicant must retire the biodiversity credits listed in Table 6. The retirement of credits must be carried out in accordance with the Biodiversity Offsets Scheme of the BC Act, to the satisfaction of the BCT.</p> <p>Table 6: Stage 5 Biodiversity credit requirements</p> <table border="1" data-bbox="398 520 1406 903"> <thead> <tr> <th data-bbox="398 520 1182 571">Credit Type</th> <th data-bbox="1182 520 1406 571">Credits Required</th> </tr> </thead> <tbody> <tr> <td colspan="2" data-bbox="398 571 1406 619"><b>Ecosystem Credits</b></td> </tr> <tr> <td data-bbox="398 619 1182 703">Bangalay Sand Forest of the Sydney Basin and South East Corner Bioregions (PCT659 – Bangalay – Old-man Banksia open forest on coastal sands, Sydney Basin Bioregion and South East Corner Bioregion)</td> <td data-bbox="1182 619 1406 703">71</td> </tr> <tr> <td colspan="2" data-bbox="398 703 1406 751"><b>Species Credits</b></td> </tr> <tr> <td data-bbox="398 751 1182 799">Southern Myotis (<i>Myotis Macropus</i>)</td> <td data-bbox="1182 751 1406 799">19</td> </tr> <tr> <td data-bbox="398 799 1182 847">Masked Owl (<i>Tyto novaehollandiae</i>)</td> <td data-bbox="1182 799 1406 847">71</td> </tr> <tr> <td data-bbox="398 847 1182 903">Barking Owl (<i>Ninox connivens</i>)</td> <td data-bbox="1182 847 1406 903">71</td> </tr> </tbody> </table>	Credit Type	Credits Required	<b>Ecosystem Credits</b>		Bangalay Sand Forest of the Sydney Basin and South East Corner Bioregions (PCT659 – Bangalay – Old-man Banksia open forest on coastal sands, Sydney Basin Bioregion and South East Corner Bioregion)	71	<b>Species Credits</b>		Southern Myotis ( <i>Myotis Macropus</i> )	19	Masked Owl ( <i>Tyto novaehollandiae</i> )	71	Barking Owl ( <i>Ninox connivens</i> )	71	<p>Annual Review, Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed credit retirement. 2022/2023 Annual Review also notes that credits have been retired.</p>	<p><b>Compliant</b></p>
Credit Type	Credits Required																
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Barking Owl ( <i>Ninox connivens</i> )	71																
<b>Flora and Fauna Management Plan</b>																	
38	<p>Prior to undertaking any vegetation clearing associated with Modification 2, the Applicant must update the Flora and Fauna Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>a) be prepared by suitably qualified ecologist and experienced person/s whose appointment has been endorsed by the Planning Secretary;</li> <li>b) be prepared in consultation with Shellharbour Council, Kiama Council and Fisheries NSW;</li> <li>c) describe the short, medium and long-term measures to be undertaken to manage remnant vegetation and fauna habitat on the site;</li> <li>d) describe the measures to be implemented within the approved disturbance areas to:</li> </ul>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner, Flora and Fauna Management Plan 2021 approved and addresses (a) – (i) of the condition.</p>	<p><b>Compliant</b></p>														



Number	Details	Evidence Sources/Questions	Audit Findings
	<ul style="list-style-type: none"><li>(i) minimise the amount of clearing where practicable (e.g. through adaptive management of ancillary infrastructure) and delineate the areas of vegetation to be cleared;</li><li>(ii) ensure that clearing is undertaken progressively;</li><li>(iii) minimise impacts on fauna, including undertaking pre-clearance surveys;</li><li>(iv) provide for the reasonable salvage, transplanting and/or propagation of threatened flora found during pre-clearance surveys, in accordance with the Guidelines for the Translocation of Threatened Plants in Australia (Vallee et al., 2004);</li><li>and</li><li>(v) maximise the salvage of resources, including tree hollows, vegetation and soil resources, for beneficial reuse, including fauna habitat enhancement;</li></ul> <p>e) describe the measures to be implemented on the site to:</p> <ul style="list-style-type: none"><li>(i) minimise impacts to threatened ecological communities listed under the BC Act and contribute to conservation strategies for these communities;</li><li>(ii) minimise impacts on fauna habitat resources such as hunting and foraging areas, habitat trees, fallen timber, hollow-bearing trees and downstream fish habitats;</li><li>(iii) enhance the quality of vegetation, vegetation connectivity and wildlife corridors including through the revegetation of appropriate canopy, sub-canopy, understorey and ground strata within the wetland vegetation to be established around the pond verges;</li><li>(iv) introduce naturally scarce fauna habitat features such as nest boxes and salvaged tree hollows in the final landform and promote the use of these introduced habitat features by threatened fauna species;</li><li>(v) manage any potential conflicts with Aboriginal heritage values;</li><li>(vi) protect vegetation and fauna habitat outside of the approved disturbance areas;</li><li>(vii) manage the collection and propagation of seed from the local area;</li><li>(viii) control weeds, including measures to avoid and mitigate the spread of noxious weeds;</li><li>(ix) control feral pests with consideration of actions identified in relevant threat abatement plans;</li><li>(x) control erosion;</li></ul>		



Number	Details	Evidence Sources/Questions	Audit Findings
	<ul style="list-style-type: none"> <li>(xi) manage any grazing and agriculture;</li> <li>(xii) control access to vegetated or revegetated areas; and</li> <li>(xiii) manage bushfire hazards;</li> </ul> <p>f) include a seasonally based program to monitor and report on the effectiveness of the above measures, progress against the detailed performance indicators and completion criteria, and identify any improvements that could be implemented to improve biodiversity outcomes;</p> <p>g) include a Compensatory Habitat Management Plan that:</p> <ul style="list-style-type: none"> <li>(i) describes the compensatory habitat proposal;</li> <li>(ii) justifies why the proposed area(s) is suitable for the compensatory habitat proposal, including how the area will integrate with existing habitat areas on and near the site;</li> <li>(iii) establishes baseline data for the existing habitat in the proposed area(s);</li> <li>(iv) describes how the compensatory habitat proposal would be implemented;</li> <li>(v) sets completion criteria for the compensatory habitat proposal; and</li> <li>(vi) describes how the performance of the compensatory habitat proposal would be monitored over time;</li> </ul> <p>h) include detailed performance and completion criteria for evaluating the performance of the compensatory habitat and offset requirements of conditions 37 and 37A and rehabilitation of the site, including triggers for remedial action, where these performance or completion criteria are not met; and</p> <p>i) include details of who would be responsible for monitoring, reviewing, and implementing the plan.</p>		
39	The Applicant must implement the Biodiversity Management Plan as approved by the Planning Secretary.	Flora and Fauna Management Plan 2021	<b>Compliant</b> Flora and Fauna Management Plan approved.
<b>Heritage</b>			
<b>Protection of Heritage Items</b>			



Number	Details	Evidence Sources/Questions	Audit Findings
40	The Applicant must ensure that the development does not cause any direct or indirect impact on any identified heritage item located outside of the approved disturbance areas, beyond those impacts predicted in the documents listed in condition 2(c) of Schedule 2.	Heritage Management Plan 2021, Modification 2 Environmental Assessment, Interview with Environmental and Stakeholder Advisor & Environmental Business Partner	<b>Compliant</b>
<b>Heritage Management Plan</b>			
41	<p>Prior to undertaking any development in Stage 5, the Applicant must prepare a Heritage Management Plan for the development to the satisfaction of the Planning Secretary. This Plan must:</p> <ul style="list-style-type: none"> <li>a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Planning Secretary;</li> <li>b) be prepared in consultation with Registered Aboriginal Parties and Heritage NSW;</li> <li>c) include consideration of the Aboriginal and non-Aboriginal cultural context and significance of the site;</li> <li>d) describe the procedures and management measures to be implemented on the site to: <ul style="list-style-type: none"> <li>(i) ensure all workers receive suitable Aboriginal cultural heritage inductions prior to carrying out any activities which may cause impacts to Aboriginal objects or Aboriginal places, and that suitable records are kept of these inductions;</li> <li>(ii) protect, monitor and manage identified non-Aboriginal heritage, Aboriginal objects and Aboriginal places (including any archaeological investigations of potential subsurface objects and salvage of objects within the approved disturbance areas, including 52-5-0907 (DLS Boral AFT 1) and 52-5-0908 (DLS Boral AFT 2) in accordance with the commitments made in the documents listed in condition 2(c) of Schedule 2;</li> <li>(iii) protect non-Aboriginal heritage, Aboriginal objects and Aboriginal places located outside the approved disturbance area from impacts of the development;</li> <li>(iv) manage the discovery of suspected human remains and any new Aboriginal objects or Aboriginal places, including provisions for burials, over the life of the development;</li> </ul> </li> </ul>	Heritage Management Plan 2021	<b>Compliant</b> Heritage Management Plan approved and addresses (a) – (g) of the condition.



Number	Details	Evidence Sources/Questions	Audit Findings
	<p>(v) maintain and manage reasonable access for relevant Aboriginal stakeholders to Aboriginal objects and Aboriginal places (outside of the approved disturbance area); and</p> <p>(vi) facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site;</p> <p>e) include a strategy for the care, control and storage of Aboriginal objects salvaged on site, both during the life of the development and in the long term;</p> <p>f) include a protocol for managing interactions with the curtilage of the State heritage listed Dunmore House and identifying how this area would be rehabilitated to ensure the Dunmore House curtilage is restored without impacting the integrity or heritage values of the site; and</p> <p>g) describe the measures to be implemented on the site to manage interactions with the Flora and Fauna Management Plan.</p>		
41A	The Applicant must implement the Heritage Management Plan approved by the Planning Secretary.	Heritage Management Plan 2021 approved and addresses (a) – (g) of the condition. Interview with Environmental and Stakeholder Advisor & Environmental Business Partner.	<b>Compliant</b>
<b>Rehabilitation</b>			
<b>Rehabilitation</b>			
42	The Applicant must progressively rehabilitate the site to the satisfaction of the Planning Secretary, in a manner that is generally consistent with the concept final landform in the documents listed in condition 2(c) of Schedule 2 (see Appendix 2), and in accordance with the conditions of this consent.	Boral website, Rehabilitation Management Plan 2021, Annual Reviews, Site Inspection	<b>Compliant</b>
<b>Rehabilitation Management Plan</b>			



Number	Details	Evidence Sources/Questions	Audit Findings
43	<p>Prior to commencing extraction in Stage 5, the Applicant must update the Rehabilitation Management Plan for the development to the satisfaction of the Planning Secretary: This plan must:</p> <p>a) be prepared:</p> <ul style="list-style-type: none"> <li>(i) by suitably qualified consultants, including a specialist hydrologist, wetlands ecologist and landscape architect, whose appointments have been approved by the Planning Secretary;</li> <li>(ii) in consultation with Shellharbour Council, Kiama Council, BCD and the Department; and</li> <li>(iii) in accordance with extant guidelines including the Constructed Wetlands Manual, Volumes 1 &amp; 2 and the Shellharbour Visual Management Plan User Manual;</li> </ul> <p>b) provide detailed plans of the final landform based on current backfill estimates;</p> <p>c) set detailed performance indicators and completion criteria for the rehabilitation of all areas disturbed by the development;</p> <p>d) describe the measures that would be implemented to achieve the criteria in paragraph (c) and triggers for remedial actions;</p> <p>e) include detailed design plans and scheduling for progressive rehabilitation to be initiated, undertaken and/or completed in the next 5 years;</p> <p>f) include a program to monitor, independently audit and report on progress against the criteria in paragraph (c) and the effectiveness of the measures in paragraph (d); and</p> <p>g) include any Riparian Area Management Plan/s prepared in accordance with condition 45 for those riparian areas to be disturbed/rehabilitated in the next 5 years.</p>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner, Rehabilitation Management Plan 2021 approved and addresses (a) – (g) of the condition.</p>	<p><b>Compliant</b></p>
44	<p>The Applicant must implement the Rehabilitation Management Plan as approved by the Planning Secretary.</p>	<p>Rehabilitation Management Plan 2021, interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner.</p>	<p><b>Compliant</b></p>
<b>Riparian Area Management Plan</b>			
45	<p>The Applicant must prepare a Riparian Area Management Plan in consultation with BCD and to the satisfaction of the Planning Secretary. For works involving:</p>	<p>Rehabilitation Management Plan 2021</p>	<p><b>Compliant</b></p>



Number	Details	Evidence Sources/Questions	Audit Findings
	a) disturbance within 3m of an existing riparian area, the plan must: <ul style="list-style-type: none"> <li>• describe the broader extraction staging and justify the need for extraction in the Riparian Area;</li> <li>• describe in detail the methods and timing for extraction within the Riparian Area;</li> <li>• provide for construction and stabilisation of appropriate diversion channels to divert the waterbody around the disturbance area, unless otherwise approved by BCD and the Planning Secretary; and</li> <li>• describe the methods for rehabilitation of the Riparian Area and diversion channels; and</li> </ul> b) construction/rehabilitation of Riparian Areas, the plan must: <ul style="list-style-type: none"> <li>• detail proposed channel/bed designs, including scour protection measures;</li> <li>• include hydraulic modelling supporting the proposed design;</li> <li>• where applicable, include measures to replicate pre-existing tidal-estuarine conditions;</li> <li>• include detailed plans for rehabilitation and revegetation of the Riparian Area using locally endemic species;</li> <li>• describe measures for the protection, enhancement and integration with adjacent threatened communities, including Freshwater Wetlands on Coastal Floodplains, Swamp Oak Floodplain Forest and Bangalay Sand Forest of the Sydney Basin and South East Corner Bioregions.</li> </ul>	– Appendix B: Riparian Area Management Plan. Riparian Area Management Plan forms part of the approved Rehabilitation Management Plan and addresses (a) – (b) of the condition.	
46	The Applicant must implement the Riparian Area Management Plan as approved by the Planning Secretary.	Rehabilitation Management Plan 2021 – Appendix B: Riparian Area Management Plan	<b>Compliant</b>
47	Deleted	N/A	N/A
<b>Rehabilitation and Conservation Bond</b>			
48	Within 6 months of the approval of Modification 2, the Applicant must lodge an updated Conservation and Rehabilitation Bond with the Department to ensure that the biodiversity offset, compensatory habitat and rehabilitation requirements of the site are implemented in accordance with the performance and completion criteria set out in the Flora and Fauna Management Plan, Rehabilitation Management Plan and the relevant conditions of this	Updated Conservation and Rehabilitation Bond not lodged as details with DP&E for confirmation acceptance	<b>Non-compliant</b> <b>Low Risk</b>



Number	Details	Evidence Sources/Questions	Audit Findings
	<p>consent. The sum of the bond must be an amount agreed by the Planning Secretary and determined by:</p> <ul style="list-style-type: none"> <li>a) calculating the full cost of implementing the biodiversity offset and compensatory habitat requirements of the consent at third party rates (other than land acquisition costs);</li> <li>b) calculating the cost of rehabilitating all disturbed areas of the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and</li> <li>c) employing a suitably qualified, independent and experienced person to verify the calculated costs</li> </ul>	of costing associated with bond.	
49	The calculation of the Conservation and Rehabilitation Bond must be submitted to the Department for approval at least 2 months prior to the lodgement of the bond.	Email advice from Environmental and Stakeholder Advisor confirmed correspondence with DP&E is still underway	<b>Compliant</b>
49A	<p>The Conservation and Rehabilitation Bond must be reviewed and if required, an updated bond must be lodged with the Department within 3 months following:</p> <ul style="list-style-type: none"> <li>a) any update or revision to the Flora and Fauna, Rehabilitation or Riparian Area Management Plans;</li> <li>b) the completion of an Independent Environmental Audit in which recommendations relating to the implementation of the biodiversity or rehabilitation requirements have been made; or</li> <li>c) in response to a request by the Planning Secretary.</li> </ul>	N/A	<b>N/A</b>
49B	If the biodiversity offset, compensatory habitat and rehabilitation requirements are completed generally in accordance with the relevant performance and completion criteria, to the satisfaction of the Planning Secretary, the Planning Secretary will release the bond.	N/A	<b>N/A</b>
49C	If the Biodiversity Offset Strategy or rehabilitation is not completed generally in accordance with the relevant performance and completion criteria, the Planning Secretary will call in all, or part of, the bond, and arrange for the completion of the relevant works.	N/A	<b>N/A</b>
<b>Long Term Management</b>			
<b>Long Term Management Strategy</b>			



Number	Details	Evidence Sources/Questions	Audit Findings
50	<p>Within 12 months of the date of this consent <b>the Applicant must</b> prepare a Long Term Management Strategy for the site to the satisfaction of the <b>Planning Secretary</b>. The strategy must:</p> <ul style="list-style-type: none"> <li>a) be prepared in consultation with Shellharbour Council, Kiama Council and the CCC;</li> <li>b) define the objectives and criteria for quarry closure and post-extraction management;</li> <li>c) investigate options for the future use of the site;</li> <li>d) describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the development; and</li> <li>e) describe how the performance of these measures would be monitored over time.</li> </ul> <p>Note: The Long Term Management Strategy may be prepared as part of the Rehabilitation Management Plan.</p>	Long Term Management Strategy 2021 (first created in 2016)	<b>Compliant</b> Long Term Management Strategy approved and addresses (a) – (e) of the condition.
51	Within 3 years of providing the Long Term Management Strategy to the <b>Planning Secretary</b> , and every 4 years thereafter, <b>the Applicant must</b> review and update the strategy to the satisfaction of the <b>Planning Secretary</b> .	Long Term Management Strategy 2021 (first created in 2016), reviewed and updated in 2017 and 2021.	<b>Compliant</b> Due for review and update in 2025.
<b>Long Term Management Trust</b>			
52	<p>Within 4 years of the date of this consent <b>the Applicant must</b> establish a trust fund (or other mechanism as agreed by the <b>Planning Secretary</b>), that has available by the end of year 20 a minimum of \$300,000 for the long term management of the site, to the satisfaction of the <b>Planning Secretary</b>. Every 4 years following establishment of the trust, <b>the Applicant must</b> review, and if necessary revise, the trust sum to the satisfaction of the Planning Secretary. This review must consider:</p> <ul style="list-style-type: none"> <li>a) the effects of inflation;</li> <li>b) any changes to the total area of disturbance; and</li> <li>c) the performance of the rehabilitation to date.</li> </ul>	Evidence of Trust Fund in the Long Term Management Strategy.	<b>Compliant</b>
<b>Traffic And Transport</b>			
<b>North Kiama Bypass</b>			

Number	Details	Evidence Sources/Questions	Audit Findings
53	<p>The Applicant must not undertake any product despatch from the development until the completion of the 'Stage 2 – Kiama Bypass' by the TfNSW.</p> <p>Note: 'Stage 2' refers to the north bound traffic carriageway due for completion in late 2005.</p>	<p>The North Kiama Bypass project was completed in December 2005 (International Environmental Consultants Pty Ltd, 2020).</p>	<b>Compliant</b>
<b>Stage 5 Access</b>			
53A	<p>Prior to any heavy vehicle access to the Stage 5 extraction areas, the Applicant must construct a channelised right turn intersection with appropriate line marking from Riverside Drive to the Stage 5A extraction area, to the satisfaction of the relevant roads authority and in accordance with the AustRoads Guide to Road Design Part 4: Intersections and Crossings –General.</p>	<p>EMM DSS July 2023 Traffic Management Plan. Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed construction of the intersection and required road works has been completed to the satisfaction of the relevant road authority.</p>	<b>Compliant</b>
<b>Road Pavement Dilapidation Report</b>			
53B	<p>Prior to the construction of the intersection upgrade described in Condition 53A, the Applicant must:</p> <ul style="list-style-type: none"> <li>a) undertake a pre-construction road pavement survey for the section of Riverside Drive that would be subject to heavy vehicle movements associated with the development;</li> <li>b) identify the likely risk of road pavement failure on Riverside Drive associated with the development;</li> <li>c) prepare a post-dilapidation survey of the section of Riverside Drive that would be subject to heavy vehicle movements associated with the development within 1 month of the completion</li> </ul>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner and Quarry Manager confirmed a pre-construction road pavement survey in</p>	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Findings
	<p>of VENM haulage to the Stage 5 area, or other timeframe agreed by the applicable roads authority; and</p> <p>d) rehabilitate and/or make good any development-related damage identified in the post-dilapidation survey prepared under paragraph (c) within 3 months of completing the post-dilapidation survey, or other timing as may be agreed by the applicable roads authority, to the satisfaction of the applicable roads authority.</p>	<p>accordance with a) and identify the likely risk of road failure in accordance with b) was completed.</p> <p>Interview also confirmed a post-dilapidation survey in accordance with c) was completed and no rehabilitation was required in accordance with condition d)</p>	
53C	If there is a dispute about the scope of any remedial works or the implementation of works required under condition 53B, then either party may refer the matter to the Planning Secretary for resolution.	N/A	N/A
<b>Works within the Road Reserve</b>			
53D	Prior to the construction of the pipeline within the within the Princes Highway road reserve (including within the culvert), the Applicant must enter into a legally binding agreement with TfNSW, for the construction, operation and decommissioning of the pipeline. The Applicant must pay for the drafting and execution of this legally binding agreement.	Interview with Environmental and Stakeholder Advisor & Environmental Business Partner and Quarry Manager confirmed legal agreement was executed with TfNSW.	Compliant
53E	The applicant must obtain a Section 138 consent under the Roads Act 1993 from TfNSW for works associated within the pipeline within the Princes Highway road reserve.	Interview with Environmental and Stakeholder Advisor & Environmental Business	Compliant



Number	Details	Evidence Sources/Questions	Audit Findings
		Partner and Quarry Manager confirmed Boral obtained a S138 Roads Act consent from TfNSW.	
<b>Parking</b>			
54	The Applicant must provide sufficient parking on-site for all quarry-related traffic, in accordance with Shellharbour Council's parking codes, and to the satisfaction of the Planning Secretary. All vehicular and pedestrian facilities must be in accordance with the TfNSW's Guide to Traffic Generating Developments.	Site Inspection	Compliant
<b>Transport Operating Conditions</b>			
55	The Applicant must: a) keep accurate records of all laden truck movements and rail transport to and from the site (including time of arrival and dispatch); b) ensure that all laden trucks and trains entering or exiting the site have their loads covered; c) ensure that all laden trucks exiting the site are cleaned of material that may fall from vehicles, before leaving the site; d) take all reasonable steps to minimise traffic safety issues and disruption to local road users; and e) take all reasonable steps to ensure that appropriate signage is displayed on all trucks used to transport quarry products from the development so they can be easily identified by other road users.	Interview with Environmental and Stakeholder Advisor & Environmental Business Partner, Quarry Manager and Weighbridge operator and site inspection demonstrated compliance with condition b) – e)	Compliant
<b>Traffic Management Plan</b>			
56	Prior to undertaking any construction transportation activities relating to Modification 2, the Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Planning Secretary. This plan must: a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary; b) be prepared in consultation with TfNSW, Shellharbour Council and Kiama Council;	EMM DSS July 2021 TMP  EMM DSS July 2023 TMP  Interview with Environmental and	Compliant



Number	Details	Evidence Sources/Questions	Audit Findings
	<p>c) include details of all transport routes and traffic types to be used for development-related traffic;</p> <p>d) describe the processes in place for the control of truck movements entering and exiting the site;</p> <p>e) include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users associated with quarry operations;</p> <p>f) detail the specific protocols to be observed for the construction of ancillary site infrastructure and site preparation works, including hours of operation, traffic controls and mitigation measures to ensure traffic on Riverside Drive is not significantly impeded by site traffic during construction;</p> <p>g) include a Drivers' Code of Conduct that includes procedures to ensure that drivers:</p> <ul style="list-style-type: none"> <li>(iv) adhere to posted speed limits or other required travelling speeds;</li> <li>(v) adhere to designated transport routes; and</li> <li>(vi) implement safe and quiet driving practices;</li> </ul> <p>h) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct;</p> <p>i) propose measures to minimise the transmission of dust and tracking of material onto the surface of public roads from vehicles exiting the site;</p> <p>j) propose measures (such as the installation of inclinometers) to monitor detect any ground movement adjacent to the Princes Highway as a result of the extraction in Stage 5B; and</p> <p>k) outline the procedures that would be implemented to respond to and address any material ground movements detected under paragraph (j) and demonstrate the long-term stability and safety of stage 5B extraction area on the Princess Highway road reserve.</p>	<p>Stakeholder Advisor &amp; Environmental Business Partner advised TMP is with DP&amp;E for approval.</p>	
56A	<p>The Applicant must implement the Traffic Management Plan as approved by the Planning Secretary.</p>	<p>EMM DSS July 2021 TMP</p> <p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed EMM</p>	<p><b>Compliant</b></p>



Number	Details	Evidence Sources/Questions	Audit Findings
<b>Rail Transport</b>			
57	<a href="#">The Applicant must</a> maximise the use of rail transport for delivery/despatch outside the Illawarra Region, to the satisfaction of the <a href="#">Planning Secretary</a> . Details of transportation modes and measures to assess and encourage rail transport <a href="#">must</a> be provided in the <a href="#">Annual Review</a> .	Annual Reviews	<b>Compliant</b>  FY 20/21 Rail = 591t FY 21/22 Rail = 10,407t FY 22/23 Rail = Not reported in Section 2.5 of the Annual Review.  No Annual Reviews detail measures to assess and encourage rail transport.  <b>Opportunity for improvement</b> <b>[DSS6/23]:</b> Ensure rail transport mode is documented in FY23/24 Annual Review, and detail measures to assess and encourage rail transport in Annual Reviews.

Number	Details	Evidence Sources/Questions	Audit Findings
<b>Visual Impact</b>			
58	<b>The Applicant must</b> minimise the visual impacts of the development to the satisfaction of the <b>Planning Secretary</b> .	Rehabilitation Management Plan 2021, site inspection, interview with Environmental and Stakeholder Advisor & Environmental Business Partner.	<b>Compliant</b>
<b>Tree Screens</b>			
59	Prior to the commencement of any works, <b>the Applicant must</b> establish and subsequently maintain a tree screen along the eastern boundary (and northeastern and southeastern boundaries) <b>of Stages 2-4</b> , to the satisfaction of the <b>Planning Secretary</b> .	Site Inspection	<b>Compliant</b>
60	Within 2 months of completing construction of the processing area, <b>the Applicant must</b> establish and subsequently maintain a tree screen around the processing area to the satisfaction of the <b>Planning Secretary</b> .	Site Inspection	<b>Compliant</b>
<b>Landscaping Plan</b>			
61	<b>The Applicant must</b> establish the tree screens identified in conditions 59 and 60 in accordance with a Landscaping Plan that has been prepared in consultation with Shellharbour Council and Kiama Council, and to the satisfaction of the <b>Planning Secretary</b> . The plan <b>must</b> be prepared by a suitably qualified ecologist/landscape architect and must: <ul style="list-style-type: none"> <li>a) be prepared in accordance with the Shellharbour Visual Management Plan User Manual;</li> <li>b) comprise a full range of Swamp Oak Floodplain Forest species;</li> <li>c) provide for the planting of trees of sufficient maturity that will ensure the prompt screening of the site;</li> <li>d) provide for a sufficient planting width and density to ensure that the site will be effectively screened when viewed from the Princes Highway and residential areas.</li> </ul>	Independent Environmental Audit 2020 (International Environmental Consultants Pty Ltd, 2020)	<b>Compliant</b> Previous audit confirmed that an approved Landscape Concept Plan was prepared by Hughes Landscape Architects in accordance with this condition and appended to the former Dunmore Rehabilitation Management Plan. The



Number	Details	Evidence Sources/Questions	Audit Findings
			Rehabilitation Management Plan has now been superseded by a 2021 version, but the screens have been planted.
<b>Lighting Emissions</b>			
62	The Applicant must take all practicable measures to prevent and/or minimise any off-site lighting impacts from the development.	Site inspection, review of complaints register. No lighting impact complaints have been received in relation to the development. Lighting visible off-site at night from highway but not considered to be impacting the areas surrounding the development.	<b>Compliant</b>
63	All external lighting associated with the development must comply with Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting.	Lighting layout.	<b>Not able to determine</b> Lighting information was not known/collected by Boral.
<b>Waste Management</b>			
64	The Applicant must a) manage on-site sewage treatment and disposal in accordance with the requirements of an applicable EPL, and to the satisfaction of EPA and Shellharbour Council; b) minimise the waste generated by the development;	Waste Management Plan 2021, Interview with Environmental and Stakeholder Advisor & Environmental Business	<b>Compliant</b> Waste management and classification reported on Annual Reviews.

Number	Details	Evidence Sources/Questions	Audit Findings
	<p>c) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and</p> <p>d) report on waste minimisation and management in the Annual Review.</p>	Partner, Annual Review, EPL, Site Inspection.	In general, waste on site was being classified and managed appropriately.
<b>Backfilling Material</b>			
65	<p><sup>7</sup> The Applicant must use VENM for the purpose of void backfilling.</p> <p>Note: The definition of VENM may include soil that has been assessed by a certified practicing soil scientist in accordance with the Acid Sulfate Soil Management Advisory Council guidelines and determined to be Potential Acid Sulfate Soil (PASS) and which satisfies all of the requirements for classification as VENM, except that it contains sulfidic soils, that has been approved by EPA for disposal on the site, and that is managed in accordance with the procedures in the EPL for the development.</p>	Waste Management Plan 2021	<b>Compliant</b> The Waste Management Plan details that VENM will be used for the purpose of void backfilling.
66	<sup>8</sup> Backfilling of the voids must be undertaken in a manner, and with material with suitable physical characteristics, so that it does not significantly affect the direction or rate of groundwater flow from the site.	Waste Management Plan 2021	<b>Compliant</b>
67	<sup>9</sup> All fines separated from the dredged sand must be placed below the permanent water table within 12 hours of processing the dredged sand	Waste Management Plan 2021 – Section 5.4.1	<b>Compliant</b>
<b>VENM Receipt and Processing</b>			
67A	The Applicant must not process and/or blend more than 120,000 tonnes of VENM per annum.	Interview with Environmental and Stakeholder Advisor & Environmental Business Partner confirmed no exceedance of volume of VENM being processed and/ or blended.	<b>Compliant</b>
67B	Except as expressly permitted in an applicable EPL, specific resource recovery order or exemption under the Protection of the Environment Operations (Waste) Regulation 2014, the	EPL	<b>Compliant</b>

Number	Details	Evidence Sources/Questions	Audit Findings
	Applicant must not receive waste at the site for storage, treatment, processing or reprocessing.		
<b>Waste Management Plan</b>			
68	<sup>10</sup> Within 12 months of the date of this consent the Applicant must prepare and subsequently implement a Waste Management Plan for the development, in consultation with EPA, and to the satisfaction of the Planning Secretary. The plan must include: a) VENM receipt and acceptance, processing and blending procedures; b) procedures for the management of fines from the processing plant; c) procedures for managing potential acid sulfate soils; and d) procedures for minimising and managing other wastes generated by the development.	Waste Management Plan 2021	<b>Compliant</b> Waste Management Plan approved and addresses (a) – (d) of the condition.
68A	The Applicant must implement the Waste Management Plan as approved by the Planning Secretary.	Waste Management Plan 2021	<b>Compliant</b>
<b>Bushfire Management</b>			
69	The Applicant must: a) ensure that the development: (i) provides for asset protection in accordance with the relevant requirements in the Planning for Bushfire Protection (RFS, 2019) guideline; and (ii) ensure that there is suitable equipment to respond to any fires on the site; and b) assist the RFS and emergency services to the extent practicable if there is a fire in the vicinity of the site.	Site inspection.	<b>Compliant</b>
<b>Emergency And Hazards Management</b>			
<b>Dangerous Goods</b>			
70	The Applicant must ensure that the storage, handling, and transport of dangerous goods is conducted in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code.	Site inspection, Interview with Environmental and Stakeholder Advisor & Environmental Business Partner. Boral is about to	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Findings				
<b>Safety</b>							
71	The Applicant must secure the development to ensure public safety to the satisfaction of the Planning Secretary.	undertake audit of dangerous goods onsite.  Incident reporting, site inspection of security fences/gates.	<b>Compliant</b>				
<b>Production Data</b>							
72	The Applicant must: a) provide annual production data to the MEG using the standard form for that purpose; and b) include a copy of this data in the Annual Review.	Annual Reviews	<b>Compliant</b> In annual reviews for 2020, 2021 and 2023.				
<b>Schedule 4: Additional Procedures</b>							
<b>Additional Mitigation Upon Request</b>							
1	<p>Upon receiving a written request from the owner of any residence on the land listed in Table 7, the Applicant must implement additional noise mitigation measures (such as double-glazing, insulation and/or air conditioning) at the residence in consultation with the landowner.</p> <p>Table 7: Land subject to additional mitigation upon request</p> <table border="1"> <thead> <tr> <th>Mitigation Basis</th> <th>Land</th> </tr> </thead> <tbody> <tr> <td>Noise</td> <td>79 Fig Hill Lane, Dunmore</td> </tr> </tbody> </table> <p>Note: To interpret the land referred to in Table 7, see the applicable figure in Appendix 3.</p> <p>These measures must be reasonable and feasible, consistent with the measures outlined in the Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Development (NSW Government, 2014), proportionate to the level of predicted impact and directed towards reducing the noise impacts of the development.</p>	Mitigation Basis	Land	Noise	79 Fig Hill Lane, Dunmore	<p>Interview with Quarry Manager and Environmental and Stakeholder Advisor &amp; Environmental Business Partner - confirmed no written request from the owner of any residence on the land listed in Table 7 has been received by Boral.</p>	<b>Compliant</b>
Mitigation Basis	Land						
Noise	79 Fig Hill Lane, Dunmore						
2	If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the	N/A	<b>N/A</b>				





Number	Details	Evidence Sources/Questions	Audit Findings
	implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.		
<b>Notification Of Landowners/Tenants</b>			
3	Within one month of the date of this consent, the Applicant must notify in writing the owner of the residences on the land listed in Table 7 that they are entitled to ask the Applicant to install additional mitigation measures at the residence.	Interview with Quarry Manager and Environmental and Stakeholder Advisor & Environmental Business Partner -confirmed Boral within one month of the date of this consent notified in writing the owner of the residences on the land listed in Table 7 that they are entitled to ask Boral to install additional mitigation measures at the residence.	<b>Compliant</b>
4	Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, the Applicant must: a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the fact sheet entitled “Mine Dust and You” (NSW Health, 2017); and b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Planning Secretary.	N/A	N/A

Number	Details	Evidence Sources/Questions	Audit Findings
<b>Notification Of Exceedances</b>			
5	As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any noise or air quality criterion in Schedule 3 of this consent, the Applicant must provide the details of the exceedance to any affected landowners, tenants and the CCC.	Interview with Environmental and Stakeholder Advisor & Environmental Business Partner confirmed no exceedance of noise or air quality criterion.	N/A
6	For any exceedance of any air quality criterion in Schedule 3 of this consent, the Applicant must also provide to any affected land owners and/or tenants a copy of the fact sheet entitled "Mine Dust and You" (NSW Health, 2017).	N/A	N/A
<b>Independent Review</b>			
7	If a landowner considers the development to be exceeding any relevant noise or air quality criterion in Schedule 3 of this consent, they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their residence or land.	N/A	N/A
8	If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.	N/A	N/A
9	If the Planning Secretary is satisfied that an independent review is warranted, within 3 months, or other timeframe agreed by the Planning Secretary and the landowner, of the Planning Secretary's decision, the Applicant must: a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to: (i) consult with the landowner to determine their concerns; (ii) conduct monitoring to determine whether the development is complying with the relevant criterion in Schedule 3 of this consent; and (iii) if the development is not complying with the relevant criterion, identify measures that could be implemented to ensure compliance with the relevant criterion; and b) give the Planning Secretary and landowner a copy of the independent review; and	N/A	N/A



Number	Details	Evidence Sources/Questions	Audit Findings
	c) comply with any written requests made by the Planning Secretary to implement any findings of the review.		
<b>Schedule 5: Environmental Management, Reporting and Auditing</b>			
<b>Environmental Management</b>			
<b>Environmental Management Strategy</b>			
1	<p>If the <b>Planning Secretary</b> requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the <b>Planning Secretary</b>. This strategy must:</p> <ul style="list-style-type: none"> <li>a) be submitted to the <b>Planning Secretary</b> for approval within 6 months of the <b>Planning Secretary</b> requiring preparation of the strategy by notice to the Applicant;</li> <li>b) provide the strategic framework for the environmental management of the development;</li> <li>c) identify the statutory approvals that apply to the development;</li> <li>d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</li> <li>e) describe the procedures that would be implemented to:               <ul style="list-style-type: none"> <li>• keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>• receive, handle, respond to, and record complaints;</li> <li>• resolve any disputes that may arise during the course of the development;</li> <li>• respond to any non-compliance <b>and any incident</b>; and</li> <li>• respond to emergencies; and</li> </ul> </li> <li>f) include:               <ul style="list-style-type: none"> <li>• <b>references to</b> any strategies, plans and programs approved under the conditions of this development consent; and</li> <li>• a clear plan depicting all the monitoring to be carried out under the conditions of this consent.</li> </ul> </li> </ul>	<p>Dunmore Sand and Soil Environmental Management Strategy (EMS) March 2023 – prepared to meet objectives b) – f) of Sch 5 condition 1. EMS 2023 indicates EMS not submitted to Planning Secretary.</p> <p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed the Planning Secretary did not require the Applicant to prepare the EMS.</p>	<p><b>N/A</b></p> <p><b>Opportunity for improvement [DSS7/23]:</b> Legislation section needs to be updated with relevant legislation for Biodiversity Conservation Act.</p>
1A	The Applicant must implement the Environmental Management Strategy as approved by the Planning Secretary.	N/A.	N/A



Number	Details	Evidence Sources/Questions	Audit Findings
<b>Management Plan Requirements</b>			
2	<p>The Applicant must ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <p>a) detailed baseline data;</p> <p>b) a description of:</p> <ul style="list-style-type: none"><li>• the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li><li>• any relevant limits or performance measures/criteria; and</li><li>• the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</li></ul> <p>c) any relevant commitments or recommendations identified in the document/s listed in condition 2(c) of Schedule 2;</p> <p>d) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;</p> <p>e) a program to monitor and report on the: impacts and environmental performance of the development; and effectiveness of any management measures (see (c) above);</p> <p>f) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;</p> <p>g) a program to investigate and implement ways to improve the environmental performance of the development over time;</p> <p>h) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"><li>• incidents;</li><li>• complaints;</li><li>• non-compliances with statutory requirements; and</li><li>• exceedances of the impact assessment criteria and/or performance criteria; and</li></ul> <p>i) a protocol for periodic review of the plan.</p>	Management plans	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Findings
<p>Note: The <b>Planning Secretary</b> may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</p>			
<p><b>Revision of Strategies, Plans &amp; Programs</b></p>			
3	<p>Within 3 months of:</p> <ul style="list-style-type: none"><li>a) the submission of an incident report under condition 7 below;</li><li>b) the submission of an Annual Review under condition 9 below;</li><li>c) the submission of an audit report under condition 10 below; and</li><li>d) the approval of any modifications to this consent (unless the conditions require otherwise), the Applicant must review the suitability of existing strategies, plans, and programs required under this consent.</li></ul>	<p>Annual Review, Management plans, programs and strategies required under the consent, interview Environmental and Stakeholder Advisor &amp; Environmental Business Partner</p> <p>There have been no more modifications to this consent after the 16/11/20.</p>	<p><b>Compliant</b> Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed that a review of documents is completed in accordance with this condition.</p> <p><b>Opportunity for improvement [DSS8/23]:</b> The document control tables within the all the plans, strategies and programs required under this consent do not reflect the reviews have occurred. Ensure all documents are reviewed in accordance with this condition of consent. Update the relevant management plans to</p>



Number	Details	Evidence Sources/Questions	Audit Findings
4	<p>If necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans, and programs required under this consent must be revised, to the satisfaction of the Planning Secretary and submitted to the Planning Secretary for approval within six weeks of the review.</p> <p>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</p>	<p>There have been no modifications to this consent after the 16/11/20. Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed there has not been a need to improve the environmental performance or comply with a direction.</p>	<p>contain information on timing of review.</p> <p><b>Compliant</b></p>
<b>Adaptive Management</b>			
5	<p>The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&amp;A Act or EP&amp;A Regulation.</p> <p>Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:</p> <ul style="list-style-type: none"><li>a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;</li><li>b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and</li><li>c) implement remediation measures as directed by the <b>Planning Secretary</b> to the satisfaction of the <b>Planning Secretary</b></li></ul>	<p>Annual Reviews. No exceedances identified from data available however Air Quality Annual Review report old criteria.</p>	<p><b>Compliant</b></p>



Number	Details	Evidence Sources/Questions	Audit Findings
<b>Community Consultative Committee</b>			
6	<p>The Applicant must operate a Community Consultative Committee (CCC) for the development, to the satisfaction of the <b>Planning Secretary</b>. This CCC must be operated in general accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version)</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.</li> <li>In accordance with the guideline, the committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, and the local community.</li> <li>The requirement for this CCC may be fulfilled by a regional CCC for any two or more of Boral’s quarrying operations in the South Coast area.</li> </ul>	<p>CCC meeting minutes and guidelines, consultation with CCC Chairperson, consultation with DP&amp;E.</p>	<p><b>Compliant</b></p> <p>Website posted meeting dates: 02/09/20; 10/02/21; 29/09/21; 16/02/22; 16/02/23;</p> <p><b>Opportunity for improvement</b> <b>[DSS9/23]:</b> Review CCC operations against latest guideline- DP&amp;E CCC guideline – State Significant Projects June 2023 version.</p>
<b>Reporting</b>			
<b>Incident Notification</b>			
7	<p>The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing through the Department’s Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.</p>	<p>Evidence of notification provided by Environmental and Stakeholder Advisor.</p>	<p><b>Compliant</b></p>
<b>Non-Compliance Notification</b>			
7A	<p>Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing through the</p>	<p>Project Website</p>	<p><b>Compliant</b></p>

Number	Details	Evidence Sources/Questions	Audit Findings
	<p>Department's Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.</p> <p>Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.</p>	<p>Interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed there has been no non-compliance on or after the 16/11/20.</p>	
<b>Regular Reporting</b>			
8	<p>The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.</p>	Project Website	<b>Compliant</b>
<b>Annual Review</b>			
9	<p>By the end of September each year, or other timing as may be agreed by the <b>Planning Secretary</b>, the Applicant must review the environmental performance of the development to the satisfaction of the <b>Planning Secretary</b>. This review must:</p> <p>a) describe the development (including rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;</p> <p>b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against:</p> <ul style="list-style-type: none"> <li>the relevant statutory requirements, limits or performance measures/criteria;</li> <li>requirements of any plan or program required under this consent;</li> <li>the monitoring results of previous years; and</li> <li>the relevant predictions in the documents listed in <b>condition 2(c)</b> of Schedule 2;</li> </ul> <p>c) <b>identify any non-compliance</b> or incident which occurred in the previous financial year, <b>and describe what actions were (or are being) taken to</b> rectify the non-compliance and avoid reoccurrence;</p> <p>d) evaluate and report on:</p>	<p>Project Website</p> <p>Annual Review 2020-2021 not on website.</p> <p>Annual Review 2020-21 (Sept 2021 -prepared by EMM – Not certified/signed by a Boral authorised officer).</p> <p>a) – 2.3, 2.4, 3,4.8</p> <p>b) – 4</p> <p>c) – 1.1, 4</p> <p>d) – 4</p> <p>e) – not listed in Table 1</p> <p>f) – 4</p>	<p><b>Compliant</b></p> <p>Opportunity for improvement <b>[DSS10/23]</b></p> <p>Update Annual Review document Table 1 to include condition 9 e) and ensure all Appendices are attached to the Annual Review and/or available on the website.</p>





Number	Details	Evidence Sources/Questions	Audit Findings
	<ul style="list-style-type: none"> <li>• the effectiveness of the noise and air quality management systems; and</li> <li>• compliance with the performance measures, criteria and operating conditions of this consent;</li> </ul> <p>e) identify any trends in the monitoring data over the life of the development;</p> <p>f) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p> <p>g) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.</p> <p>The Applicant must ensure that copies of the Annual Review are submitted to the Planning Secretary and Council and are available to the Community Consultative Committee (see condition 6 of Schedule 5) and any interested person upon request.</p>	<p>g) - 4</p> <p>Doc control indicates copies sent to DP&amp;E, EPA, Council &amp; Document available on website for CCC. App C (Noise monitoring) &amp; App D (Annual groundwater monitoring report) not included in report.</p> <p>Annual Review 2021-22 (Sept 2022 -prepared by IEC – Certified/Signed by Boral authorised officer).</p> <p>a) – 2.3, 2.4, 3,4.8</p> <p>b) – 4</p> <p>c) – 1.1, 4</p> <p>d) – 4</p> <p>e) – not listed in Table 1</p> <p>f) – 4</p> <p>g) - 4</p> <p>Doc control indicates copies sent to DP&amp;E, EPA, Council &amp; Document available on website for CCC</p> <p>Annual Review 2022-2023 (Sept 2023 - prepared by Boral</p>	



Number	Details	Evidence Sources/Questions	Audit Findings
		employee – Certified/Signed by Boral authorised officer). a) – 2.3, 2.4, 3,4.8 b) – 4 c) – 1.1, 4 d) – 4 e) – not listed in Table 1 f) – 4 g) - 4 Document control indicates copy only sent to DP&E and no indication if sent to Council. Document available on website for CCC.	
<b>Independent Environmental Audit</b>			
10	By 30 September 2017, and every 3 years thereafter, unless the <b>Planning Secretary</b> directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must: a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the <b>Planning Secretary</b> ; b) include consultation with the relevant agencies and the CCC; c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licence (including any assessment, plan or program required under these approvals); d) review the adequacy of any approved strategy, plan or program required under these approvals; and	Independent Environmental Audit (IEA) 2020 (International Environmental Consultants Pty Limited)  Boral commissioned the 2023 IEA after the 30/09/23, around 18/10/23.	<b>Non-compliant</b> <b>Low Risk</b> However timing for 2023 Audit approved by DP&E 01/11/23 letter to Mr Bray.



Number	Details	Evidence Sources/Questions	Audit Findings
	<p>e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals.</p> <p>Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the <b>Planning Secretary</b>.</p>		
11	<p>Within 6 weeks of commissioning this audit, or as otherwise agreed by the <b>Planning Secretary</b>, the Applicant must submit a copy of the audit report to the <b>Planning Secretary</b>, Council, EPA and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, <b>and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Planning Secretary.</b></p>	<p>DP&amp;E 01/11/23 letter to Mr Bray approving Audit to be submitted to DP&amp;E &amp; others within 12 weeks of the site inspection for the 2023 audit.</p>	<p><b>Compliant</b></p>
<b>Access To Information</b>			
12	<p>By 30 November 2016, unless otherwise agreed by the <b>Planning Secretary</b>, the Applicant must:</p> <p>a) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> <li>• the documents listed in <b>condition 2(c)</b> of Schedule 2;</li> <li>• current statutory approvals for the development; <input checked="" type="checkbox"/> approved strategies, plans or programs;</li> <li>• a summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;</li> <li>• minutes of CCC meetings;</li> <li>• a summary of the current phase and progress of the development;</li> <li>• contact details to enquire about the development or to make a complaint;</li> <li>• a complaints register, which is to be updated on a <b>monthly</b> basis;</li> <li>• the Annual Reviews <b>of the development</b>;</li> <li>• <b>reports prepared as part of</b> any independent environmental audit, and the Applicant's response to the recommendations in any audit <b>report</b>;</li> <li>• any other matter required by the <b>Planning Secretary</b>; and</li> </ul> <p>b) keep this information up-to-date, to the satisfaction of the <b>Planning Secretary</b>.</p>	<p>Boral Dunmore website accessed at:  <a href="https://www.boral.com.au/locations/boral-dunmore-operations">https://www.boral.com.au/locations/boral-dunmore-operations</a></p>	<p><b>Non-compliant</b>  <b>Low Risk</b></p> <p><b>Opportunity for improvement</b>  <b>[DSS11/23]:</b> Upload the following documents to the website:</p> <ul style="list-style-type: none"> <li>• Modification 2 – Consolidated Development Consent</li> <li>• 20/21 Annual Review</li> <li>• Response to the recommendati</li> </ul>



Number	Details	Evidence Sources/Questions	Audit Findings
			<p>on of the 2020 IEA</p> <ul style="list-style-type: none"><li>• Documents listed in condition 2(c) of Schedule 2 <i>i.e. c) generally in accordance with the EIS, EA Mod 1, SEE Mod 3 and EA Mod 2.</i></li></ul>

## 5. COMPLIANCE WITH THE ENVIRONMENT PROTECTION LICENCE

This section assesses compliance against the relevant requirements of the Environmental Protection Licence (EPL) 11147. Information about the EPL was sourced from the NSW Environmental Protection Authority (EPA) website located at the following link: <https://app.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=11147&id=11147&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued>. The site was accessed 09 November 2023.

The current licence is attached at Appendix 2.

For the purpose of the EPL audit, a review was conducted of three (3) annual return periods: October 2020/June 2021 – July 2022/June 2023. The 2020 IEA reviewed the prior EPL returns.

### 5.1. SUMMARY OF FINDINGS

Non-compliances in the periods October 2020/June 2021 – July 2022/June 2023 are presented in Table 5-1. Only one non-compliance was recorded, and it relates to licence condition M2.2.

Boral has taken appropriate action to mitigate non-compliance issues, as requested by the EPA. Consultation with the EPA occurred as part of the audit and no further issues or non-compliances were raised.

Table 5-1: Non-compliances associated with EPL annual returns.

Annual Return Start Date	Annual Return End Date	Licence Condition #	Type of non-compliance	EPA Actions	Number of times occurred
July 2022	June 2023	M2.2	Sample Point 2 (dust deposition gauge) was contaminated in the month of October 2022 and not analysed. twelve samples were undertaken for the year as required by the EPL, however only 11 analyses were obtained.	EPA action determined as part of scheduled inspection program	1



## 6. COMPLIANCE WITH CONTROLLED ACTIVITY APPROVAL

Dunmore Sand and Soil holds two Controlled Activity Approvals:

- 10CX123242 (10 ERM2010/1116) granted in December 2017 covers mining and redirection of water from the Stage 2 pond area; and
- 10CX122266 covers extraction within 10m of Rocklow Creek.

The two controlled activities relate to water licence documents from the NSW Water Register:

- WAL2477 - licence is for 77.00 ML from the Sydney Basin South Groundwater Source and has a work approval 10WA106714.
- WAL42100 - licence is for 15.00ML from the Metropolitan Coastal Sands Groundwater Source but doesn't appear to have a work approval.

Information from Boral EA April 2019 to support Modification 2 regarding water access licences notes:

*The site is located within the Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources within the defined 'Illawarra Rivers' water source.*

*The current operation has a groundwater Water Access Licence (WAL24477) issued under the Water Management Act 2000. The licence permits the taking of 65ML/y of water from the Sydney Basin South Groundwater Source and is subject to a number of conditions. Associated 'work approvals' include 10WA106713 and 10WA106714.*

*The additional Stage 5 extraction area would require additional water demand for operations of the Dunmore Lakes Sand Project. The current water demand is at the threshold of licensed extraction volumes.*

*An additional Water Access Licence (WAL 42100) for 15ML has been obtained, at the time of preparing this report no Water Supply Work approval has been nominated in conjunction with this licence.*

*A WAL for a further 20ML of allocation which has been secured is being applied for. (A further allocation of 20ML has been secured from the Metropolitan Coastal Sands Groundwater source however both a WAL and WSW are pending for this allocation)*

The site inspection, interview with the Environmental and Stakeholder Advisor & Environmental Business Partner and aerial imagery analysed from NearMap confirmed compliance with the Controlled Activities.



## 7. ADEQUACY OF STRATEGIES, PLANS AND PROGRAMS

This section reviews the adequacy of the projects strategies, plans and programs and provides recommendations for measures or actions to improve the documents, where applicable.

### 7.1. CRITERIA FOR ASSESSING ADEQUACY

Consistent with the previous audit, the adequacy of strategies, plans and programs have been assessed in accordance with the following criteria:

- **Compliance with review/revision requirements:** understand if documents are maintained as current and effective.
- **Compliance with conditions of consent:** ensure documents are consistent with the conditions of consent.
- **Clear objectives, defined actions and performance criteria:** determine whether the document is structured in a manner that clearly communicates the objectives, actions and performance criteria.
- **Align with best practice and/or relevant guidelines.**
- **Implementation and monitoring:** determine if the document outlays implementation processes and monitoring requirements.
- **Assigned responsibilities:** identify whether clear responsibilities and accountabilities have been assigned.
- **Integration:** as many environmental aspects and impacts are interrelated, it is crucial documents are linked to enable holistic environmental site management.

### 7.2. DOCUMENT REVIEW AND REVISION

The consent condition regarding review and revision of plans was updated in Modification 2 (November 2020). The revised condition (Schedule 5, Conditions 3 & 4) reads:

3. *Within 3 months of:*

- (a) *the submission of an incident report under condition 7 below;*
- (b) *the submission of an Annual Review under condition 9 below;*
- (c) *the submission of an audit report under condition 10 below; and*
- (d) *the approval of any modifications to this consent (unless the conditions require otherwise),*

*The Applicant must review, and if necessary revise, the strategies, plans and programs required under this consent to the satisfaction of the Planning Secretary.*

*4. If necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans, and programs required*

*under this consent must be revised, to the satisfaction of the Planning Secretary and submitted to the Planning Secretary for approval within six weeks of the review.*

*Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.*

All plans should be reviewed, and where applicable updated, following the finalisation of this audit report.

## 7.3. ADEQUACY REVIEW

### 7.3.1. Noise Management Plan

#### Assessment Against Consent Requirements

Table 7-1: Assessment of Noise Management Plan Against Consent Requirements

Condition Requirement	Section Addressed
<b>Schedule 3, Condition 17</b>	
The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:	Section 1.2
a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;	
b) describe the noise management system and measures to be implemented to ensure:	
compliance with the noise criteria and operating conditions in this consent;	Section 5.1
leading practice management is being employed;	
noise impacts of the development are minimised during noise-enhancing meteorological conditions;	
c) include a protocol for distinguishing noise emissions of the development from other nearby or neighbouring developments; and	Section 6.2
d) include a monitoring program that:	
is capable of evaluating the performance of the development against the construction and operational noise criteria;	
monitors noise at the nearest and/or most affected residences or other representative monitoring locations set out in the Noise Management Plan;	Section 6
adequately supports the noise management system; and	
includes a protocol for identifying any noise-related exceedance, incident or noncompliance and notifying the Department and relevant stakeholders of any such event.	
The Applicant must implement the Noise Management Plan as approved by the Planning Secretary.	Section 8.2



## Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Purpose and scope are listed in Section 1.1, and performance criteria in Section 4.
- **Align with best practice and/or relevant guidelines:** relevant Australian Standards and Codes noted in Section 6.1.4.
- **Implementation and monitoring:** Implementation and monitoring actions are clearly defined; however 2021 and 2023 Annual Noise Monitoring Assessments are not on the website.
- **Assigned responsibilities:** Responsibilities are clearly defined in the document.
- **Integration:** Integration with other plans and approvals is referenced where relevant throughout the document.

## Assessment of Adequacy

This plan is adequate for its purpose.

## 7.3.2. Air Quality Management Plan

### Assessment Against Consent Requirements

Table 7-2: Assessment of Air Quality Management Plan Against Consent Requirements

Condition Requirement	Section Addressed
<b>Schedule 3, Condition 20B</b>	
The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Planning Secretary. This plan must: a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary	Section 1.2
b) describe the measures to be implemented to ensure: <ul style="list-style-type: none"><li>• compliance with the air quality criteria and operating conditions in this consent;</li><li>• leading practice management is being employed (including in respect of minimisation of greenhouse gas emissions from the site); and</li><li>• air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;</li></ul>	Section 5
c) describe the air quality management system; and	Section 5
d) include an air quality monitoring program that: <ul style="list-style-type: none"><li>• is capable of evaluating the performance of the development against the air quality criteria;</li><li>• adequately supports the air quality management system; and</li><li>• includes a protocol for identifying any air quality-related exceedance, incident or non-compliance and</li></ul>	Section 6

Condition Requirement	Section Addressed
notifying the Department and relevant stakeholders of any such event	
The Applicant must implement the Air Quality Management Plan as approved by the Planning Secretary	Section 8.2

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Purpose and scope are listed in Section 1.1, and performance criteria in Section 4.
- **Align with best practice and/or relevant guidelines:** No reference to specific guidelines or standards, but is considered to align with best practice.
- **Implementation and monitoring:** Implementation and monitoring actions are clearly defined. However, old criteria are being reported on in the Annual Reviews.
- **Assigned responsibilities:** Responsibilities are defined in the Section 8.1 of document.
- **Integration:** Air Quality Monitoring Program 2017 on the website contains old monitoring criteria.
- **Opportunity for Improvement [DSS12/23]** recommends Air Quality Monitoring Program 2017 is updated with correct criteria, or removed from website if it is superseded by the Air Quality Monitoring in Section 6 of the Air Quality Management Plan 2021.

### Assessment of Adequacy

This plan is adequate for its purpose, but requires focus on implementation and integration. The Air Quality Monitoring Program states the project is using 'portable real-time "DustTrak" particulate monitors' and High Volume Air Sampler (HVAS) (Section 6). The Annual Review (Section 4.2) states 'deposited dust gauges and HVAS'.

## 7.3.3. Soil and Water Management Plan

### Assessment Against Consent Requirements

Table 7-3: Assessment of Soil and Water Management Plan Consent Requirements

Condition Requirement	Section Addressed
<b>Schedule 3, Condition 30</b>	
The Applicant must prepare a Soil and Water Management Plan for the development to the satisfaction of the Planning Secretary. This plan must: (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;	Section 1.4

Condition Requirement	Section Addressed
(b) be prepared in consultation with EPA and DPIE Water;	Section 1.5
(c) include a:	Section 5.1
(i) Site Water Balance that includes details of:	
• predicted annual inflows to and outflows from the site;	
• sources and security of water supply for the life of the development (including authorised entitlements and licences);	Section 5.2
• water storage capacity, use and management on the site;	Sections 5.1 & 6.3
• licenced discharges points and limits;	Section 6.1 & 6.5
• reporting of annual water extraction and maximum instantaneous pumping rates to the Department; and	Section 5.4
• procedures for the annual preparation of an updated site water balance.	Section 5.4
(ii) Erosion and Sediment Control Plan that:	
• is consistent with the requirements of Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book (Landcom 2004) and Volume 2E: Mines and Quarries (DECC 2008);	Section 7
• identifies activities that could cause soil erosion, generate sediment or affect flooding;	Section 7.1
• includes a program to review the adequacy of existing flood protection works;	Section 7.4
• describes measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage flood risk;	Section 7.2
• describes the location, function, and capacity of erosion and sediment control structures and flood management structures; and	Section 7.3
• describes what measures would be implemented to maintain (or if necessary decommission) the structures over time.	Section 7.4
(iii) Surface Water Management Plan, that includes:	Section 6.1
• detailed baseline data on surface water flows and quality in watercourses, water bodies, wetlands and/or fish habitat that could potentially be affected by the development;	
• a detailed description of the surface water management system on the site, including the:	Section 6.6
– clean water diversion system;	
– erosion and sediment controls;	
– dirty water management system; and	
– water storages;	
• a program to monitor and evaluate:	
– any surface water discharges;	
– bank and bed stability;	
– the effectiveness of the water management system;	



Condition Requirement	Section Addressed
<ul style="list-style-type: none"> <li>– impacts on water supply for other water users; and</li> <li>– surface water flows and quality in watercourses, waterbodies, wetlands and/or fish habitats that could potentially be impacted by the development; Section 6.4</li> <li>• surface water impact assessment criteria and performance measures, including trigger levels for investigating and responding to potentially adverse impacts; Section 6.5</li> <li>• a protocol for identifying and investigating any exceedances of the surface water impact assessment criteria and for notifying the Department and relevant stakeholders of these events</li> </ul>	
(iv) Groundwater Management Plan that includes: <ul style="list-style-type: none"> <li>• detailed baseline data of groundwater levels, flows and quality for groundwater resources and groundwater dependent ecosystems potentially impacted by the development;</li> </ul>	Section 8.2
<ul style="list-style-type: none"> <li>• a detailed description of the groundwater management system;</li> </ul>	Section 8.1
<ul style="list-style-type: none"> <li>• a program to monitor and evaluate:               <ul style="list-style-type: none"> <li>– water loss/seepage from water storages into the groundwater system, including from any final void;</li> <li>– groundwater inflows, outflows and storage volumes, to inform the Site Water Balance;</li> <li>– impacts on groundwater supply for other water users;</li> <li>– impacts on groundwater dependent ecosystems;</li> <li>– the hydrogeological setting of any nearby alluvial aquifers and the likelihood of any indirect impacts from the development; and</li> <li>– the effectiveness of the groundwater management system;</li> </ul> </li> </ul>	Section 8.3
<ul style="list-style-type: none"> <li>• groundwater impact assessment criteria and performance measures, including trigger levels for investigating and responding to potentially adverse groundwater impacts (or trends) associated with the development on regional and local aquifers and/or the groundwater supply for other water users such as licensed privately-owned groundwater bores;</li> </ul>	Section 8.4
<ul style="list-style-type: none"> <li>• a protocol for identifying and investigating any exceedances of the groundwater performance criteria and for notifying the Department and relevant stakeholders of these events; and</li> <li>• a protocol to obtain appropriate water licence(s) to cover the volume of any unforeseen groundwater inflows into the extraction areas.</li> </ul>	Section 8.5
The Applicant must implement the Soil and Water Management Plan approved by the Planning Secretary.	Section 1.6

Condition Requirement	Section Addressed
The Applicant must not commence extraction in Stage 5 until the Soil and Water Management Plan is approved by the Planning Secretary.	Section 1.3

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Purpose and objectives are identified in Section 1.3, assessment criteria and trigger values identified throughout document.
- **Align with best practice and/or relevant guidelines:** relevant guidelines detailed in Table 2.3; report is considered to generally align with best practice.
- **Implementation and monitoring:** Implementation and monitoring actions are clearly defined.
- **Assigned responsibilities:** Responsibilities are allocated in Section 1.6 of the document.
- **Integration:** Integration with other plans and approvals is referenced where relevant throughout the document.

### Assessment of Adequacy

This plan is adequate for its purpose.

## 7.3.4. Acid Sulfate Soils Management Plan

### Assessment Against Consent Requirements

Table 7-4: Assessment of Acid Sulfate Soils Management Plan

Condition Requirement	Section Addressed
<b>Schedule 3, Condition 33</b>	
Prior to commencing extraction in Stage 5, the Applicant must prepare an Acid Sulfate Soils Management Plan for Stage 5 operations, to the satisfaction of the Planning Secretary. The plan must:	Section 1 and Appendix A
a) be prepared in consultation with EPA and by a suitably qualified person whose appointment has been approved by the Planning Secretary;	
b) describe the measures that would be implemented to limit the risk of acid sulfate soils being mobilised during Stage 5 operations;	Section 6.1
c) describe the measures that would be implemented to limit the risk of acid sulphate soils being imported with the VENM; and	Section 6.2
d) include a Trigger Action Response Plan with a hierarchy of actions to avoid, mitigate and manage	Section 7.5.1

acid sulfate soils impacts.

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Generally covered in Section 1 with actions and performance criteria contained throughout the document.
- **Align with best practice and/or relevant guidelines:** relevant best practice guidance including relevant guidelines are referenced in Section 1 and throughout the document.
- **Implementation and monitoring:** Section 7.5 sets out the monitoring program for water and soil while other sections of the document describes other monitoring.
- **Assigned responsibilities:** responsibilities have not been assigned to a particular position and/or person.
- **Integration:** integration with other plans are described.

### Assessment of Adequacy

This plan is adequate for its purpose.

## 7.3.5. Flora and Fauna Management Plan

### Assessment Against Consent Requirements

Table 7-5: Assessment of Flora and Fauna Management Plan Against Consent Requirements

Condition Requirement	Section Addressed
<b>Schedule 3, Condition 38</b>	
Prior to undertaking any vegetation clearing associated with Modification 2, the Applicant must update the Flora and Fauna Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:	Section 1.1
a) be prepared by suitably qualified ecologist and experienced person/s whose appointment has been endorsed by the Planning Secretary;	
b) be prepared in consultation with Shellharbour Council, Kiama Council and Fisheries NSW;	Section 1.4 Evidence of Consultation (Appendix F)
c) describe the short, medium and long-term measures to be undertaken to manage remnant vegetation and fauna habitat on the site;	Section 4.2
d) describe the measures to be implemented within the approved disturbance areas to:	Section 4.1, Section 4.2, Vegetation Clearing Protocol (Appendix B)
(i) minimise the amount of clearing where practicable (e.g. through adaptive management of ancillary infrastructure) and delineate the areas of vegetation to be cleared;	
(ii) ensure that clearing is undertaken progressively;	
(iii) minimise impacts on fauna, including undertaking pre-clearance surveys;	



Condition Requirement	Section Addressed
<ul style="list-style-type: none"> <li>(iv) provide for the reasonable salvage, transplanting and/or propagation of threatened flora found during pre-clearance surveys, in accordance with the Guidelines for the Translocation of Threatened Plants in Australia (Vallee et al., 2004); and</li> <li>(v) maximise the salvage of resources, including tree hollows, vegetation and soil resources, for beneficial reuse, including fauna habitat enhancement;</li> </ul>	
<p>e) describe the measures to be implemented on the site to:</p> <ul style="list-style-type: none"> <li>(i) minimise impacts to threatened ecological communities listed under the BC Act and contribute to conservation strategies for these communities;</li> <li>(ii) minimise impacts on fauna habitat resources such as hunting and foraging areas, habitat trees, fallen timber, hollow-bearing trees and downstream fish habitats;</li> <li>(iii) enhance the quality of vegetation, vegetation connectivity and wildlife corridors including through the revegetation of appropriate canopy, sub-canopy, understorey and ground strata within the wetland vegetation to be established around the pond verges;</li> <li>(iv) introduce naturally scarce fauna habitat features such as nest boxes and salvaged tree hollows in the final landform and promote the use of these introduced habitat features by threatened fauna species;</li> <li>(v) manage any potential conflicts with Aboriginal heritage values;</li> <li>(vi) protect vegetation and fauna habitat outside of the approved disturbance areas;</li> <li>(vii) manage the collection and propagation of seed from the local area;</li> <li>(viii) control weeds, including measures to avoid and mitigate the spread of noxious weeds;</li> <li>(ix) control feral pests with consideration of actions identified in relevant threat abatement plans;</li> <li>(x) control erosion;</li> <li>(xi) manage any grazing and agriculture;</li> <li>(xii) control access to vegetated or revegetated areas; and</li> <li>(xiii) manage bushfire hazards;</li> </ul>	<p>Section 4.1, Section 4.2, Section 4.5, Section 4.6, Section 4.7, Compensatory Habitat Management Plan (Appendix D), Vegetation Clearing Protocol (Appendix B), Ground Disturbance and Vegetation Clearing (Appendix C), Pest and Weed Management Plan (Appendix E)</p>
<p>f) include a seasonally based program to monitor and report on the effectiveness of the above measures, progress against the detailed performance indicators and completion criteria, and identify any improvements that could be implemented to improve biodiversity outcomes;</p>	<p>Section 4.7</p>
<p>g) include a Compensatory Habitat Management Plan that:</p> <ul style="list-style-type: none"> <li>(i) describes the compensatory habitat proposal;</li> <li>(ii) justifies why the proposed area(s) is suitable for the compensatory habitat proposal, including how the area will integrate with existing habitat areas on and near the site;</li> <li>(iii) establishes baseline data for the existing habitat in the proposed area(s);</li> </ul>	<p>Compensatory Habitat Management Plan (Appendix D)</p>

Condition Requirement	Section Addressed
(iv) describes how the compensatory habitat proposal would be implemented; (v) sets completion criteria for the compensatory habitat proposal; and (vi) describes how the performance of the compensatory habitat proposal would be monitored over time;	
h) include detailed performance and completion criteria for evaluating the performance of the compensatory habitat and offset requirements of conditions 37 and 37A and rehabilitation of the site, including triggers for remedial action, where these performance or completion criteria are not met; and	Section 4.7
i) include details of who would be responsible for monitoring, reviewing, and implementing the plan.	Section 5

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Objectives clearly stated in Section 1.3. Section 4 defines actions. Section 5 sets out the review requirements.
- **Align with best practice and/or relevant guidelines:** Section 2.2 documents the guidelines relevant to the plan.
- **Implementation and monitoring:** Includes management actions in Section 4 and monitoring requirements in Section 5.
- **Assigned responsibilities:** Responsibilities are assigned against the management actions in Table A.1.
- **Integration:** Section 2.5 summarises the alignment with other project plans.

### Assessment of Adequacy

This plan is adequate for its purpose.

**Opportunity for Improvement [DSS13/23]:** remove reference to superseded legislation *NSW Threatened Species Conservation Act 1995* from Dunmore Lakes Sand Project: Flora and Fauna Management Plan 2021.

## 7.3.6. Heritage Management Plan

### Assessment Against Consent Requirements

Table 7-6: Assessment of Heritage Management Plan Against Consent Requirements

Condition Requirement	Section Addressed
Schedule 3, Condition 41	



Prior to undertaking any development in Stage 5, the Applicant must prepare a Heritage Management Plan for the development to the satisfaction of the Planning Secretary. This Plan must:

(a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary; Section 1.5

(b) be prepared in consultation with Registered Aboriginal Parties and Heritage NSW; Section 1.5  
Section 3

(c) include consideration of the Aboriginal and non-Aboriginal cultural context and significance of the site; Section 2

(d) describe the procedures and management measures to be implemented on the site to:

(i) ensure all workers receive suitable Aboriginal cultural heritage inductions prior to carrying out any activities which may cause impacts to Aboriginal objects or Aboriginal places, and that suitable records are kept of these inductions; Section 4.2.4

(ii) protect, monitor and manage identified non-Aboriginal heritage, Aboriginal objects and Aboriginal places (including any archaeological investigations of potential subsurface objects and salvage of objects within the approved disturbance area, including 52-5-0907 (DLS Boral AFT 1) and 52-5-0908 (DLS Boral AFT 2) in accordance with the commitments made in the documents listed in condition 2(c) Section 4.2.1  
Section 4.3.1  
Section 4.3.3

(iii) protect non-Aboriginal heritage, Aboriginal objects and Aboriginal places located outside the approved disturbance area from impacts of the development; Section 4.1.4  
Section 4.1.5

(iv) manage the discovery of suspected human remains and any new Aboriginal objects or Aboriginal places, including provisions for burials, over the life of the development; Section 4.2.5

(v) maintain and manage reasonable access for relevant Aboriginal stakeholders to Aboriginal objects and Aboriginal places (outside of the approved disturbance area); and Section 4.2.5

(vi) facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on site;

(e) include a strategy for the care, control and storage of Aboriginal objects salvaged on site, both during the life of the development and in the long term; Section 4.2.2

(f) include a protocol for managing interactions with the curtilage of the State heritage listed Dunmore House and identifying how this area would be rehabilitated to ensure the Dunmore House curtilage is restored without impacting the integrity or heritage values of the site; and Section 4.3.3

(g) describe the measures to be implemented on the site to manage interactions with the Flora and Fauna Management Plan; Section 4.1.6

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Objectives stated in Section 1.2. Section 4 includes actions. Section 4.1.7 sets out the review requirements.

- **Align with best practice and/or relevant guidelines:** Relevant guidelines cited throughout.
- **Implementation and monitoring:** Implementation outlined in Section 1.3. No clear, specific information on monitoring included.
- **Assigned responsibilities:** Responsibilities are assigned in Section 4.1.1.
- **Integration:** Section 4.1.6 summarises the alignment with other project plans.

### Assessment of Adequacy

This plan is adequate for its purpose.

**Opportunity for Improvement [DSS14/23]:** include clear and specific information on monitoring in future iterations of the Heritage Management Plan.

## 7.3.7. Rehabilitation Management Plan

### Assessment Against Consent Requirements

Table 7-7: Assessment of Rehabilitation Management Plan Against Consent Requirements

Condition Requirement	Section Addressed
<b>Schedule 3, Condition 43</b>	
Prior to commencing extraction in Stage 5, the Applicant must update the Rehabilitation Management Plan for the development to the satisfaction of the Planning Secretary: This plan must:	
a) be prepared:	
(i) by suitably qualified consultants, including a specialist hydrologist, wetlands ecologist and landscape architect, whose appointments have been approved by the Planning Secretary;	Section 1.1
(ii) in consultation with Shellharbour Council, Kiama Council, BCD and the Department; and	Section 1.4
(iii) in accordance with extant guidelines including the Constructed Wetlands Manual, Volumes 1 & 2 and the Shellharbour Visual Management Plan User Manual;	
b) provide detailed plans of the final landform based on current backfill estimates;	Section 3 & 4
c) set detailed performance indicators and completion criteria for the rehabilitation of all areas disturbed by the development;	Section 5.9
d) describe the measures that would be implemented to achieve the criteria in paragraph (c) and triggers for remedial actions	Section 4,5,7 Section 6.4
e) include detailed design plans and scheduling for progressive rehabilitation to be initiated, undertaken and/or completed in the next 5 years;	Section 5
f) include a program to monitor, independently audit and report on progress against the criteria in paragraph (c) and the effectiveness of the measures in paragraph (d); and	Section 5.7

g) include any Riparian Area Management Plan/s prepared in accordance with condition 45 for those riparian areas to be disturbed/rehabilitated in the next 5 years.

Appendix B

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** purpose and objectives clearly stated in 1.3 of the plan. Performance indicators tabled in Table 8.
- **Align with best practice and/or relevant guidelines:** Section 2.2 documents the guidelines relevant to the plan.
- **Implementation and monitoring:** Includes revegetation plan/actions, and monitoring in Section 5.
- **Assigned responsibilities:** Does not include specific information on roles and responsibilities.
- **Integration:** Section 2.5 summarises the alignment with other project plans.

### Assessment of Adequacy

This plan is adequate for its purpose.

## 7.3.8. Riparian Area Management Plan

### Assessment Against Consent Requirements

Table 7-8: Assessment of Riparian Area Management Plan Against Consent Requirements

Condition Requirement	Section Addressed
<b>Schedule 3, Condition 45</b>	
The Applicant must prepare a Riparian Area Management Plan in consultation with BCD and to the satisfaction of the Planning Secretary. For works involving:	Appendix B
a) disturbance within 3m of an existing riparian area, the plan must: <ul style="list-style-type: none"> <li>• describe the broader extraction staging and justify the need for extraction in the Riparian Area;</li> <li>• describe in detail the methods and timing for extraction within the Riparian Area;</li> <li>• provide for construction and stabilisation of appropriate diversion channels to divert the waterbody around the disturbance area, unless otherwise approved by BCD and the Planning Secretary; and</li> <li>• describe the methods for rehabilitation of the Riparian Area and diversion channels; and</li> </ul>	
b) construction/rehabilitation of Riparian Areas, the plan must: <ul style="list-style-type: none"> <li>• detail proposed channel/bed designs, including scour protection measures;</li> <li>• Include hydraulic modelling supporting the proposed design;</li> <li>• where applicable, include measures to replicate preexisting tidal-estuarine conditions;</li> </ul>	Appendix B

- include detailed plans for rehabilitation and revegetation of the Riparian Area using locally endemic species;
- describe measures for the protection, enhancement and integration with adjacent threatened communities, including Freshwater Wetlands on Coastal Floodplains, Swamp Oak Floodplain Forest and Bangalay Sand Forest of the Sydney Basin and South East Corner Bioregions.

### Assessment Against Other Criteria

Is an Appendix to the Rehabilitation Management Plan, therefore the assessment against other criteria is included in Section 7.3.7 above.

### Assessment of Adequacy

This plan is adequate for its purpose.

## 7.3.9. Long Term Management Strategy

### Assessment Against Consent Requirements

Table 7-9: Assessment of Long Term Management Strategy Against Consent Requirements

Condition Requirement	Section Addressed
<b>Schedule 3, Condition 50</b>	
<i>Within 12 months of the date of this consent the Applicant must prepare a Long Term Management Strategy for the site to the satisfaction of the Planning Secretary. The strategy must:</i>	The Long Term Management Strategy
<i>a) be prepared in consultation with Shellharbour Council, Kiama Council and the CCC;</i>	Section 1.4
<i>b) define the objectives and criteria for quarry closure and post-extraction management;</i>	Section 4.1
<i>c) investigate options for the future use of the site;</i>	Section 4.2
<i>d) describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the development; and</i>	Section 6
<i>e) describe how the performance of these measures would be monitored over time.</i>	Sections 6 & 7
<i>Note: The Long Term Management Strategy may be prepared as part of the Rehabilitation Management Plan.</i>	The strategy is a separate document to the Rehabilitation Management Plan.

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** purpose and objectives clearly stated in 1.3 of the plan. Performance indicators tabled in Table 3.

- **Align with best practice and/or relevant guidelines:** Section 2 provides guiding legislative framework relevant to the plan.
- **Implementation and monitoring:** Section 7 includes an action plan, and Section 6 includes monitoring information.
- **Assigned responsibilities:** Does not include specific information on roles and responsibilities.
- **Integration:** Section 2.2 summarises the alignment with other project plans.

### Assessment of Adequacy

This plan is adequate for its purpose.

**Opportunity for Improvement [DSS15/23]:** include clear and specific information on assigned responsibilities in future iterations of the Long Term Management Strategy.

## 7.3.10. Traffic Management Plan

### Assessment Against Consent Requirements

Table 7-10: Assessment of Traffic Management Plan Against Consent Requirements

Condition Requirement	Section Addressed
<b>Schedule 3, Condition 56</b>	
Prior to undertaking any construction transportation activities relating to Modification 2, the Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:	Section 1.8
a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;	Section 1.8
b) be prepared in consultation with TfNSW, Shellharbour Council and Kiama Council;	Section 9
c) include details of all transport routes and traffic types to be used for development-related traffic;	Section 4.9
d) describe the processes in place for the control of truck movements entering and exiting the site;	Section 4.8 and Section 5
e) include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users associated with quarry operations;	Section 4.8 and 5
f) detail the specific protocols to be observed for the construction of ancillary site infrastructure and site preparation works, including hours of operation, traffic controls and mitigation measures to ensure traffic on Riverside Drive is not significantly impeded by site traffic during construction;	Sections 1.6,1.7,1.7.3,4.1,4.9,4.10
g) include a Drivers' Code of Conduct that includes procedures to ensure that drivers:	Section 5
(iv) adhere to posted speed limits or other required travelling speeds;	Section 5.3
(v) adhere to designated transport routes; and	Section 5.2
(vi) implement safe and quiet driving practices;	Section 5.4 & 5.5

Condition Requirement	Section Addressed
h) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct;	Section 5
i) propose measures to minimise the transmission of dust and tracking of material onto the surface of public roads from vehicles exiting the site;	Section 4.8
j) propose measures (such as the installation of inclinometers) to monitor detect any ground movement adjacent to the Princes Highway as a result of the extraction in Stage 5B; and	Section 4.11
k) outline the procedures that would be implemented to respond to and address any material ground movements detected under paragraph (j) and demonstrate the long term stability and safety of stage 5B extraction area on the Princess Highway road reserve.	Section 4.11
Prior to any heavy vehicle access to the Stage 5 extraction areas, the Applicant must construct a channelised right turn intersection with appropriate line marking from Riverside Drive to the Stage 5A extraction area, to the satisfaction of the relevant road's authority and in accordance with the Austroads Guide to Road Design Part 4: Intersections and Crossings General	Section 1.7.1

#### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Purpose and objectives are not clearly defined. Management actions and performance criteria are provided in Section 4.
- **Align with best practice and/or relevant guidelines:** Section 2.2 provides alignment with standards and guidelines.
- **Implementation and monitoring:** Insufficient information on monitoring.
- **Assigned responsibilities:** Insufficient information on responsibilities.
- **Integration:** Does not include information on integration with other plans.

#### Assessment of Adequacy

This plan is adequate for its purpose.

**Opportunity for Improvement [DSS16/23]:** include clear and specific information on monitoring and assigned responsibilities in future iterations of the Traffic Management Plan.

### 7.3.11. Waste Management Plan

#### Assessment Against Consent Requirements

Table 7-11: Assessment of Waste Management Plan Against Consent Requirements

Requirement	Section Addressed
<b>Schedule 3, Condition 64</b>	
The Applicant must	Section 4/5
a) manage on-site sewage treatment and disposal in accordance with the requirements of an applicable EPL, and to the satisfaction of EPA and Shellharbour Council;	
b) minimise the waste generated by the development;	Section 4
c) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and	Section 4
d) report on waste minimisation and management in the Annual Review.	Section 6
<b>Schedule 3, Condition 65</b>	
The Applicant must use VENM for the purpose of void backfilling.	Section 5
<b>Schedule 3, Condition 65</b>	
Note: The definition of VENM may include soil that has been assessed by a certified practicing soil scientist in accordance with the Acid Sulfate Soil Management Advisory Council guidelines and determined to be Potential Acid Sulfate Soil (PASS) and which satisfies all of the requirements for classification as VENM, except that it contains sulfidic soils, that has been approved by EPA for disposal on the site, and that is managed in accordance with the procedures in the EPL for the development.	Section 5, Appendix A-D
<b>Schedule 3, Condition 66</b>	
Backfilling of the voids must be undertaken in a manner, and with material with suitable physical characteristics, so that it does not significantly affect the direction or rate of groundwater flow from the site.	Section 5, Appendix A-D
<b>Schedule 3, Condition 67</b>	
All fines separated from the dredged sand must be placed below the permanent water table within 12 hours of processing the dredged sand.	Section 5.4
<b>Schedule 3, Condition 67</b>	
The applicant must not process and/or blend more than 120,000 tonnes of VENM per annum	Section 5.1
<b>Schedule 3, Condition 67B</b>	
Except as expressly permitted in an applicable EPL, specific resource recovery order or exemption under the Protection of the Environment Operations (Waste) Regulation 2014, the Applicant must not receive waste at the site for storage, treatment, processing or reprocessing	Section 5.1
<b>Schedule 3, Condition 68</b>	
Within 12 months of the date of this consent the Applicant must prepare and subsequently implement a Waste Management Plan for the development, in consultation with	Section 1.3 Appendix E

Requirement	Section Addressed
EPA, and to the satisfaction of the Secretary. The plan must include:	Section 5.1
a) VENM receipt and acceptance, processing and blending procedures;	Section 5.4
b) procedures for the management of fines from the processing plant;	Section 5.3,5.6
c) procedures for managing potential acid sulfate soils; and	Section 4
d) procedures for minimising and managing other wastes generated by the development.	
The Applicant must implement the approved management plan as approved from time to time by the Secretary.	

### Environmental Protection Licence 11147

#### L2.1

The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below. Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below. Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below. This condition does not limit any other conditions in this licence.	Section 3, 4, Appendix A-D
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#### E1

The licensee must prepare a "VENM" Verification Procedure" and ensure the Authority is provided with an up to date version of the Procedure.	Section 4.1, Appendix A-D
The "VENM Verification Procedure" prepared must be used for all material assessed as VENM. The licensee must retain a copy of all assessments made using the "VENM Verification Procedure	

#### E2

Backfilling of the voids created by sand dredging with VENM must be undertaken in a manner, and with material of suitable physical characteristics, so that it does not change the direction or rate of groundwater flow from the site to Rocklow Creek.	Section 4.1 Appendix A-D
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### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Objectives, actions and performance criteria not clearly, specifically defined. Limits and actions are provided.



- Align with best practice and/or relevant guidelines: relevant guidelines referenced throughout document.
- **Implementation and monitoring:** Implementation strategy and monitoring requirements referenced where relevant throughout.
- **Assigned responsibilities:** responsibilities are clearly defined in Section 7 and Table 6.
- **Integration:** Integration with other plans is outlined in Section 1.2.

### Assessment of Adequacy

This plan is adequate for its purpose.

## 7.3.12. Landscaping Plan

### Assessment Against Consent Requirements

Table 7-12: Assessment of Landscaping Plan Against Consent Requirements

Condition Requirement	Section Addressed
<i>Schedule 3, Condition 61</i>	
The Applicant must establish the tree screens identified in conditions 59 and 60 in accordance with a Landscaping Plan that has been prepared in consultation with Shellharbour Council and Kiama Council, and to the satisfaction of the Planning Secretary. The plan must be prepared by a suitably qualified ecologist/landscape architect and must:	Landscaping Plan is part of the Rehabilitation Management Plan 2021
a) be prepared in accordance with the Shellharbour Visual Management Plan User Manual;	Section 1.4
b) comprise a full range of Swamp Oak Floodplain Forest species;	Section 5.2
c) provide for the planting of trees of sufficient maturity that will ensure the prompt screening of the site;	Section 5.2
d) provide for a sufficient planting width and density to ensure that the site will be effectively screened when viewed from the Princes Highway and residential areas.	Section 5.2
e) describe how the performance of these measures would be monitored over time.	Section 5.9

### Assessment Against Other Criteria

Is incorporated in the Rehabilitation Management Plan, therefore the assessment against other criteria is included in Section 7.3.7 above.

### Assessment of Adequacy

This plan is adequate for its purpose.

## 8. AUDIT CONCLUSIONS

### 8.1. COMPLIANCE ASSESSMENT

#### 8.1.1. Conditions of Consent

The findings of assessment against the conditions in Schedule 2 – 5 of the Development Consent is presented below. Of the 142 conditions, 101 were assessed as compliant, 9 non-compliant, 31 N/A and 1 not able to be determined.

Table 8-1: Summary of Audit Findings

Schedule	Audit Finding				Total
	Compliant	Non-compliant	N/A	Not Able to Determine	
2	10	0	9	0	19
3	79	7	13	1	100
4	2	0	7	0	9
5	10	2	2	0	14
<b>Total</b>	<b>101</b>	<b>9</b>	<b>31</b>	<b>1</b>	<b>142</b>

#### 8.1.2. Environment Protection Licence

Since 2020, 1 non-compliance was recorded, and it relates to licence condition M2.2. The non-compliance resulted from an EPA inspection but did not result in the issue of a Penalty Notice.

#### 8.1.3. Compliance With Controlled Activity Approval

Dunmore Sand and Soil holds two Controlled Activity Approvals and was found to be in compliance with these approvals.

### 8.2. ADEQUACY OF STRATEGIES, PLANS AND PROGRAMS

A number of project strategies, plans and programs have been reviewed and updated since the 2020 audit and Mod 2 Consent in line with the revised consent conditions. Overall, documents are considered adequate for the purposes as they meet the conditioned requirements, follow a relatively consistent structure and are operational documents.

In summary, the plans have been reviewed and revised in accordance with the Mod 2 conditions of consent, the 2020 Audit recommendations. A number of recommendations are made to improve the project documents and to help ensure they remain current, including updating the document control table for each plan following each review and any change.

### 8.3. ENVIRONMENTAL PERFORMANCE

Noting there are a number of matters that require improvement, the overall environmental performance based on the observed condition of the site, the low number of non-compliances and incidents, and low number of complaints, is considered **‘satisfactory’**.

The interviews with DP&E, EPA, CCC and Shoalhaven Council all confirmed that Boral operate the sand and soil extraction well, with no major concerns raised and commendation for the responsiveness of the Boral staff. Some of the minor non-compliance actions appear to have occurred as a result of change in staff over the audit period. The re-occurrence of similar non-compliance actions have been addressed by Boral through improved environmental management systems.

The site inspection and interviews undertaken as part of this audit also confirmed that Boral have good environmental management systems in operation, with a high level of confidence in implementation of the environmental management systems, that extends to accountability and follow up from staff on the ground to senior management within Boral.


### 8.4. OPPORTUNITIES FOR IMPROVEMENT

The following table summarises the opportunities for improvement identified in this audit.

Table 8-2: Summary of Opportunities for Improvement

Reference	Consent Condition/Issue	Recommendation
DSS1/23	The applicant must not complete any vegetation clearance, construction or extraction activities within E3 zoned land. The Applicant must adjust its final flood bund design and extraction footprint for Stage 5B and the location of ancillary infrastructure.	Request from DP&E an administrative change to Consolidated Consent to update to current zoning to C3, as well as remove <i>‘Error! Reference source not found.’</i> and condition misnumbering throughout consent.
DSS2/23	The Applicant must ensure that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 3 at any residence on privately-owned land.	Update Air Quality Monitoring Program 2017 with correct criteria, or remove from website if it is superseded by the Air Quality Monitoring in Section 6 of the Air Quality Management Plan 2021.
DSS3/23	The Applicant must ensure that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 3 at any residence on privately-owned land.	Monitor and report against all current condition of consent Air Quality Criteria in the Annual Reviews.
DSS4/23	The Applicant must report on water extracted from the site	Water balance calculations to be checked for future Annual Review as reporting discrepancies

Reference	Consent Condition/Issue	Recommendation
	each year (direct and indirect) in the Annual Review, including water taken under each water licence.	noted in Annual Review 2020-2021 and Annual Review 2022-2023.
<b>DSS5/23</b>	The Applicant must report on water extracted from the site each year (direct and indirect) in the Annual Review, including water taken under each water licence.	Water balance calculations use annual production amounts for water loss of site due to sale, this calculation should use transport data of sales as this is more accurate of sand related water loss due to sales and movement of materials offsite.
<b>DSS6/23</b>	<b>The Applicant must</b> maximise the use of rail transport for delivery/despatch outside the Illawarra Region, to the satisfaction of the <b>Planning Secretary</b>	Ensure rail transport mode is documented in FY23/24 Annual Review, and detail measures to assess and encourage rail transport in Annual Reviews.
<b>DSS7/23</b>	the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the <b>Planning Secretary</b>	Legislation section needs to be updated with relevant legislation for Biodiversity Conservation Act.
<b>DSS8/23</b>	Within 3 months of: a) the submission of an incident report; b) the submission of an Annual Review c) the submission of an audit report d) the approval of any modifications to this consent	The document control tables within all the plans, strategies and programs required under this consent do not reflect the reviews have occurred. Ensure all documents are reviewed in accordance with this condition of consent. Update the relevant management plans to contain information on timing of review.
<b>DSS9/23</b>	The Applicant must operate a Community Consultative Committee (CCC) for the development, to the satisfaction of the <b>Planning Secretary</b> .	Review CCC operations against latest guideline-DP&E CCC guideline – State Significant Projects June 2023 version.
<b>DSS10/23</b>	By the end of September each year, or other timing as may be agreed by the <b>Planning Secretary</b> , the Applicant must review the environmental performance of the development to the satisfaction of the <b>Planning Secretary</b>	Update Annual Review document Table 1 to include condition 9 e) and ensure all Appendices are attached to the Annual Review and/or available on the website.
<b>DSS11/23</b>	By 30 November 2016, unless otherwise agreed by the <b>Planning Secretary</b> , the Applicant must make the listed information (within the condition) publicly available on its website.	Upload the following documents to the website: <ul style="list-style-type: none"> <li>• Modification 2 – Consolidated Development Consent</li> <li>• 20/21 Annual Review</li> <li>• Response to the recommendation of the 2020 IEA</li> </ul>



Reference	Consent Condition/Issue	Recommendation
		Documents listed in condition 2(c) of Schedule 2 <i>i.e. c) generally in accordance with the EIS, EA Mod 1, SEE Mod 3 and EA Mod 2.</i>
<b>DSS12/23</b>	Air Quality Management Program 2017 assessed against other criteria.	EPS recommends the Air Quality Monitoring Program 2017 is updated with correct criteria, or removed from website if it is superseded by the Air Quality Monitoring in Section 6 of the Air Quality Management Plan 2021.
<b>DSS13/23</b>	Flora and Fauna Management Plan 2021 adequacy review.	Remove reference to superseded legislation <i>NSW Threatened Species Conservation Act 1995</i> from Dunmore Lakes Sand Project: Flora and Fauna Management Plan 2021.
<b>DSS14/23</b>	Heritage Management Plan adequacy review.	Include clear and specific information on monitoring in future iterations of the Heritage Management Plan.
<b>DSS15/23</b>	Long Term Management Strategy adequacy review.	Include clear and specific information on assigned responsibilities in future iterations of the Long Term Management Strategy.
<b>DSS16/23</b>	Traffic Management Plan adequacy review.	Include clear and specific information on monitoring and assigned responsibilities in future iterations of the Traffic Management Plan.



APPENDIX 1

Development Consent

# Development Consent

## Section 80 of the *Environmental Planning & Assessment Act 1979*

I, the Minister for Infrastructure and Planning, approve the Development Application referred to in Schedule 1, subject to the conditions in Schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the on-going environmental management of the development.

Craig Knowles, MP  
**Minister for Infrastructure and Planning**  
**Minister for Natural Resources**

Sydney

2005

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### SCHEDULE 1

<b>Development Application:</b>	DA 195-8-2004.
<b>Applicant:</b>	Dunmore Sand and Soil Pty Limited (ABN: 62 003 497 229).
<b>Consent Authority:</b>	Minister for Infrastructure and Planning.
<b>Land:</b>	Part Lot 6 in DP 611159; Part Lot 3 and Lots 4 & 5 in DP 1030504; Part Lots 5 & 6 in DP1001931; and Lot 1 in DP 213575; and <a href="#">Lot 501 DP 1174897 and Lot 51 DP 1012246</a> Parish of Terragong, County of Camden.
<b>Proposed Development:</b>	Dunmore Lakes Sand Extraction Project (Stages 2, 3, 4, <a href="#">5A</a> and <a href="#">5B</a> ).
<b>State Significant Development:</b>	The proposal is classified as State significant development under section 76A(7)(d) of the <i>Environmental Planning and Assessment Act 1979</i> , by virtue of a direction made by the Minister under section 89 of the Act on 11 November 2004.
<b>Integrated Development:</b>	The proposal is classified as integrated development under section 91 of the <i>Environmental Planning and Assessment Act 1979</i> , as it requires additional approvals under the: <ul style="list-style-type: none"><li>• <i>Protection of the Environment Operations Act 1997</i>;</li><li>• <i>Water Act 1912</i>; and</li><li>• <i>Rivers and Foreshores Improvement Act 1948</i>.</li></ul>
<b>Designated Development:</b>	The proposal is classified as designated development under section 77A of the <i>Environmental Planning &amp; Assessment Act 1979</i> , as it is for an extractive industry that meets the criteria for designated development in schedule 3 of the <i>Environmental Planning &amp; Assessment Regulation 2000</i> .

Note:

- To find out when this development consent becomes effective, see Section 83 of the *Environmental Planning and Assessment Act 1979* (EP&A Act);
- To find out when this development consent is liable to lapse, see Section 95 of the EP&A Act; and
- To find out about appeal rights, see Section 97 of the EP&A Act.

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Blue type represents June 2016 modification

Red type represents March 2020 modification

Green type represents November 2020 modification



## DEFINITIONS

Aboriginal object / Aboriginal place	Has the same meaning as the definition of the term in section 5 of the NP&W Act
Annual Review	The review required by condition 9 of Schedule 5
Applicant	Dunmore Sand and Soil Pty Ltd or any other person or persons who rely on this consent to carry out the development that is subject to this consent
Approved disturbance area	The area identified as such on the development layout plans, as modified by the conditions of this consent
ARI	Average Recurrence Interval
BC Act	Biodiversity Conservation Act 2016
BCA	Building Code of Australia
BCD	Biodiversity Conservation Division within the Department
BCT	Biodiversity Conservation Trust
CCC	Community Consultative Committee
Conditions of this consent	Conditions contained in Schedules 2 to 5
Construction	All physical works to enable quarrying operations to be carried out, including demolition and removal of buildings or works, and erection of buildings and other infrastructure permitted by this consent
Council	Shellharbour City Council
DA	Development Application
Day	Day is defined as the period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Decommissioning	The deconstruction or demolition and removal of works installed as part of the development
Demolition	The deconstruction and removal of buildings, sheds and other structures on the site
Department	Department of Planning, Industry & Environment
Development	The development described in the documents listed in condition 2(c) of Schedule 2
Development Layout Plans	The plans in Appendix 1
DPIE Crown Lands	Crown Lands Group within the Department
DPIE Water	Water Group within the Department
EA Mod 1	Modification application Mod 1 and the accompanying Environmental Assessment titled <i>Dunmore Lakes Sand Project (DA 195-8-2004) – Modification 1</i> dated 26 April 2016
EA Mod 2	Modification application Mod 2 and the accompanying Environmental Assessment titled <i>Dunmore Lakes Sand Extraction Project Modification 2 Environmental Assessment</i> dated April 2019 and associated Response to Submissions dated June 2019
EIS	Environmental Impact Statement for the <i>Dunmore Lakes Sand Extraction Proposal, Stages 2, 3 and 4: Environmental Impact Statement, Volumes 1 &amp; 2</i> , dated August 2004 and supplementary information titled <i>Dunmore Lakes Sand Extraction Proposal, Stages 2, 3 and 4: Response to EIS Issues</i> , dated February 2005
Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
EPA	Environment Protection Authority
EPL	Environment Protection Licence issued under the <i>Protection of the Environment Operations Act 1997</i>
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
Evening	Evening is defined as the period from 6pm to 10pm
Feasible	Means what is possible and practical in the circumstances
Financial year	A period of 12 months from 1 July to 30 June
Fisheries NSW	Fisheries Branch of the Primary Industries Group within the Department
GTA	General Term of Approval
Heritage NSW	Heritage NSW within the Department of Premier and Cabinet

Heritage Item	An Aboriginal object, an Aboriginal place, or a place, building, work, relic, moveable object, tree or precinct of heritage significance, that is listed under any of the following: <ul style="list-style-type: none"> <li>• the <i>National Parks and Wildlife Act 1974</i>;</li> <li>• the State Heritage Register under the <i>Heritage Act 1977</i>;</li> <li>• a state agency heritage and conservation register under section 170 of the <i>Heritage Act 1977</i>;</li> <li>• a Local Environmental Plan under the EP&amp;A Act;</li> <li>• the World Heritage List;</li> <li>• the National Heritage List or Commonwealth Heritage List under the EPBC Act; or</li> <li>• anything identified as a heritage item under the conditions of this consent.</li> </ul>
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance
Laden trucks	Trucks transporting materials or products to or from the site
Land	As defined in the EP&A Act, except where the term is used in the noise and air quality conditions in Schedules 3 and 4 of this consent, where it is defined as the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent.
Material harm	Is harm to the environment that: <ul style="list-style-type: none"> <li>• involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial; or</li> <li>• results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)</li> </ul> This definition excludes "harm" that is authorised under either this consent or any other statutory approval
MEG	Regional NSW - Mining, Exploration and Geoscience
Minimise	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development
Minister	NSW Minister for Planning and Public Spaces, or delegate
Modification 2	The modification described in EA Mod 2
Negligible	Small and unimportant, such as to be not worth considering
Night	Night is defined as the period from 10pm to 6am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
Noise sensitive areas	Areas where quarrying operations are being carried out that have potential to lead to increased noise at privately-owned residences, such as elevated areas or areas near the boundary of the site
Non-compliance	An occurrence, set of circumstances or development that is a breach of this consent
Privately-owned land	Land that is not owned by a public agency, a quarrying company or its subsidiary; or where relevant, land that is not covered by a private agreement between the Applicant and the land owner that specifically allows for variances to criteria for environmental performance in this consent
Planning Secretary	Secretary of the Department, or nominee
POEO Act	Protection of the Environment Operations Act 1997
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, etc
Quarrying operations	The extraction, processing, stockpiling and transportation of extractive materials carried out on the site and the associated removal of vegetation, topsoil and overburden

Reasonable	Means applying judgement in arriving at a decision, taking into account: mitigation benefits, costs of mitigation versus benefits provided, community views, and the nature and extent of potential improvements
Registered Aboriginal Parties	Means the Registered Aboriginal Parties for the project who were determined in accordance with the <i>National Parks and Wildlife Regulation 2019</i>
Rehabilitation	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable and non-polluting
Residence	Existing or approved dwelling at the date of grant of this consent
RFS	NSW Rural Fire Service
SEE Mod 3	Modification application Mod 3 and the accompanying Statement of Environmental Effects titled <i>Dunmore Sand and Soil: DA195-8-2004 Proposed Modification 3</i> dated 24 June 2019, associated Response to Submissions dated 31 October 2019 and responses to information requests dated 21 January 2020 and 11 February 2020
Shoulder	Time interval from 6am to 7am, Monday to Saturday
Site	Land to which the DA applies
TfNSW	Transport for NSW
VENM	Virgin Excavated Natural Material, as defined in the <i>Protection of the Environment Operations Act 1997</i>
Waste	Has the same meaning as the definition of the term in the Dictionary to the POEO Act

## SCHEDULE 2 ADMINISTRATIVE CONDITIONS

### Obligation to Minimise Harm to the Environment

1. In addition to meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.

### Terms of Approval

2. The Applicant must carry out the development:
  - a) in compliance with the conditions of this consent;
  - b) in accordance with all written directions of the Planning Secretary;
  - c) generally in accordance with the EIS, EA Mod 1, SEE Mod 3 and EA Mod 2; and
  - d) generally in accordance with the Development Layout in Appendix 1.

*Note: The Development Layout Plan is included in Appendix 1.*

3. If there is any inconsistency between the documents identified in condition 2(c), the more recent document shall prevail to the extent of the inconsistency. The conditions of this consent shall prevail to the extent of any inconsistency with the documents identified in condition 2(c).
4. The Applicant must comply with any reasonable requirement/s of the Planning Secretary arising from the Department's assessment of:
  - a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent (including any stages of these documents);
  - b) any reviews, reports or audits commissioned by the Department regarding compliance with this consent; and
  - c) the implementation of any actions or measures contained in these documents.

### Limits on Approval

3. Quarrying operations may be carried out on the site until 15 May 2031.

#### *Notes:*

- *Under this consent, the Applicant is required to decommission and rehabilitate the site and carry out other requirements in relation to quarrying operations. Consequently, this consent will continue to apply in all respects other than to permit the carrying out of quarrying operations until the rehabilitation of the site and other requirements have been carried out to the required standard.*
  - *Any on-going use of the site for processing and blending activities after quarrying operations cease would be the subject of a separate application.*
6. The Applicant must not produce or transport more than 800,000 tonnes of product each financial year from the site.

### Structural Adequacy

7. The Applicant must ensure that any new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

#### *Notes:*

- *Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for any building works.*
- *Part 8 of the EP&A Regulation sets out the detailed requirements for the certification of development.*

### Demolition

8. The Applicant must ensure that all demolition work is carried out in accordance with AS 2601-2001: *The Demolition of Structures* (Standards Australia, 2001), or its latest version.

### Protection of Public Infrastructure

9. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:

- a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
- b) relocate, or pay the full costs associated with relocating any public infrastructure that needs to be relocated as a result of the development.

*Note: This condition does not apply to any damage to roads caused as a result of general road usage or otherwise addressed by the Road Pavement Dilapidation Report required by condition 53B of Schedule 3 of this consent.*

#### **Operation of Plant and Equipment**

10. **The Applicant must** ensure that all plant and equipment at the site, or used in connection with the development, are:
  - a) maintained in a proper and efficient condition; and
  - b) operated in a proper and efficient manner.

#### **Notification of Commencement**

11. The Department must be notified in writing of the date of commencement of any of the following phases of the development, at least two weeks before that date:
  - a) construction activities associated with Modification 2;
  - b) quarrying operations in each of Stages 5A and 5B;
  - c) cessation of quarrying operations (i.e. quarry closure); and
  - d) any period of suspension of quarrying operations (i.e. care and maintenance).

#### **Staging, Combining and Updating Strategies, Plans or Programs**

12. With the approval of the Planning Secretary, the Applicant may:
  - a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);
  - b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined);
  - c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development); and
  - d) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required by an adjoining quarrying consent or approval, in common ownership or management.
13. If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this consent if those requirements are not applicable to the particular stage.
14. If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.

#### **Application of Existing Strategies, Plans or Programs**

15. The Applicant must continue to apply existing management strategies, plans or monitoring programs required under this consent prior to the approval of Modification 2, until the approval of a similar plan, strategy or program following the approval of Modification 2.

#### **Compliance**

16. The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.

#### **Applicability of Guidelines**

17. References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of inclusion (or later update) in the condition.
18. However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, in respect of ongoing monitoring and management obligations,

agree to or require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.

#### **Crown Land**

19. The Applicant must consult with DPIE – Crown Lands prior to undertaking any development on Crown Land or Crown Roads.

## SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

### GENERAL EXTRACTION AND PROCESSING PROVISIONS

#### Identification of Boundaries

1. Within 6 months of the date of this consent and prior to the commencement of extraction operations in each of Stage 5A and Stage 5B, the Applicant must:
  - a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction for Stages 2, 3, 4, 5A and 5B (as set out conceptually in Appendix 1 and as amended by the conditions of this consent);
  - b) submit a survey plan of these boundaries and their GPS coordinates to the Planning Secretary; and
  - c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits.

#### Stages 2 – 4 Extraction Areas

2. The Applicant must not undertake extraction within 3 metres of the project site boundary for Stages 2 - 4. Batter slopes from this extraction limit must be no steeper than 1:3 (V:H).
3. The Applicant must not undertake any stockpiling of material in the area marked 'Potential Future Stockpiling Area' on Figure 2.2 of the EIS.

#### Stage 4 – Tabbita Road Corridor

4. The Applicant must not undertake any extraction in Stage 4 without the prior approval of the Planning Secretary. An application to undertake extraction in Stage 4 must be accompanied by an extraction management plan that must:
  - a) detail the proposed realignment and rehabilitation of Tabbita Road and associated infrastructure;
  - b) assess the environmental impacts of the proposed realignment; and
  - c) include appropriate agreements with affected parties, to the satisfaction of the Planning Secretary.

#### Western, Northern and Eastern Tributaries

*Note: The Applicant is required to obtain a Controlled Activity Approval from DPIE Water under the Water Management Act 2000 prior to undertaking any works within 40 metres of Rocklow Creek or the Western, Northern and Eastern Tributaries, or any water feature connected to these protected waters.*

5. The Applicant must not undertake extraction within 3 metres of the bank of the Eastern Tributary. Batter slopes from this extraction limit must be no steeper than 1:3 (V:H).
6. The Applicant must maintain the integrity of the Northern and Western Tributaries for as long as practicable. In this regard, the Applicant must only extract sand within 3 metres of the bank of the tributaries in accordance with an approved Riparian Area Management Plan (see condition **Error! Reference source not found.**). Batter slopes from this extraction limit must be no steeper than 1:2 (V:H).

#### Southern, North-eastern and North-western Wetlands

7. The Applicant must not undertake extraction within 10 metres of the bank of the southern or north-eastern wetlands. Batter slopes from this extraction limit must be no steeper than 1:2 (V:H).
8. The Applicant must commission a suitably qualified ecologist, whose appointment has been endorsed by the Planning Secretary, to mark out the extraction limit to the southern and north-eastern wetlands.

*Note: The southern and north-eastern wetlands are defined as the area that constitutes Freshwater Wetlands on Coastal Floodplains, an endangered ecological community under the former Threatened Species Conservation Act 1995.*

9. The Applicant must ensure that extraction within 40m of the southern, north-eastern and north-western wetlands occurs towards the end of dredging when the dredge pond water volume is maximised, and in accordance with an approved Riparian Area Management Plan (see condition **Error! Reference source not found.**). The plan must include an assessment by a suitably qualified hydrogeologist justifying the extraction limit referred to in condition 7, based on data obtained from the site.

## Rocklow Creek Realignment

10. Prior to the commencement of extraction in [Sub-Stage 3C1 \(see Appendix 1\)](#), the Applicant must complete the realignment and rehabilitation of Rocklow Creek, to the satisfaction of the [Planning Secretary](#). The realignment **must** be undertaken in accordance with an approved Riparian Area Management Plan (see condition 45). The realigned channel **must** be designed so as to safely convey, without bed or bank erosion, the 1 in 20 year ARI peak flow.
11. [The Applicant must](#) not undertake extraction within 3 metres of the bank of the realigned Rocklow Creek. Batter slopes from this extraction limit **must** be no steeper than 1:2 (V:H).
12. [The Applicant must](#) provide for the ultimate redirection of the realigned Rocklow creek into the lake in Stage 3, unless otherwise approved by the [Planning Secretary](#). The redirection **must** be undertaken in accordance with an approved Riparian Area Management Plan (see condition **Error! Reference source not found.**).

## Stage 5 Extraction Areas

- 12A. The Applicant must not undertake extraction within 3 metres of the project boundary for Stage 5A adjacent to Riverside Drive or the project boundary for Stage 5B adjacent to the private property at 79 Fig Hill Lane.
- 12B. The Applicant is not permitted to undertake any vegetation clearance, construction or extraction activities within lands zoned as E3 under the *Shellharbour Local Environment Plan 2013*. In this regard, the Applicant must adjust its final flood bund design and extraction footprint for Stage 5B and the location of ancillary infrastructure (including water management infrastructure) to stand off these lands.

## NOISE

### Operational Noise Criteria

13. Except for the carrying out of approved construction works, the Applicant must ensure that the noise generated by the development does not exceed the criteria specified in Table 1.

**Table 1: Noise impact assessment criteria dB(A)**

Residential Location	Shoulder L <sub>Aeq</sub> (15 mins)	Day L <sub>Aeq</sub> (15 mins)	Evening L <sub>Aeq</sub> (15 mins)	Night L <sub>Aeq</sub> (15 mins)
Dunmore Village residences – 31 Shellharbour Road	47	49	44	41
R20	47	49	44	38
R3, R11, R12, R13, R14, R15, R16, R17, R18, 79 Fig Hill Lane	48	48	43	38
R19	46	47	43	38
R4, R5, R6, R7, R8, R9, R10	43	47	43	38
Renton (183 James Road Dunmore)	46	46	43	37
All other residences	35	40	35	35

- 13A. Noise generated by the development must be monitored and measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the *NSW Noise Policy for Industry* (EPA, 2017).
- 13B. The noise criteria in Table 1 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.



## Operating Hours

14. <sup>1</sup> The Applicant must comply with the operating hours in Table 2:

Table 2: Operating Hours

Activity	Day	Time
Dredging and processing	Monday – Saturday	6:00am to 6:00pm
	Sunday and Public Holidays	8:00am to 4:00pm
Excavator extraction	Monday – Saturday	6:30am to 6:00pm
	Sunday and Public Holidays	Nil
Delivery, distribution and maintenance	Monday – Friday	5:00am to Midnight
	Saturday	6:00am to 6:00pm
	Sunday and Public Holidays	8:00am to 4:00pm
Delivery and distribution via Shellharbour Road and Riverside Drive	Monday – Friday	7:00am to 10:00pm
	Saturday	7:00am to 6:00pm
	Sunday and Public Holidays	8:00am to 4:00pm
Maintenance (if inaudible at neighbouring residences)	Anytime	Anytime

15. <sup>2</sup>The following activities may be carried out at the premises outside the hours specified in Table 2:
- the delivery or dispatch of materials as requested by Police or other public authorities for safety reasons; and
  - emergency work to avoid the loss of lives, property and/or to prevent environmental harm. In such circumstances the Applicant must notify the Department and affected residents prior to undertaking the works, or within a reasonable period in the case of emergency.

## Construction Hours

- 15A. Approved construction works must be undertaken during standard construction hours (7 am to 6 pm, Monday to Friday and 8 am to 1 pm on Saturdays), unless the Planning Secretary agrees otherwise.

## Noise Operating Conditions

16. The Applicant must:
- take all reasonable steps to minimise noise from construction and operational activities, including low frequency noise and other audible characteristics, as well as road noise associated with the development;
  - implement reasonable and feasible noise attenuation measures on all plant and equipment that will operate in noise sensitive areas;
  - operate a noise management system to guide day to day planning of quarrying operations and implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent;
  - take all reasonable steps to minimise the noise impacts of the development during noise-enhancing meteorological conditions;
  - carry out regular attended noise monitoring to determine whether the development is complying with the relevant conditions of this consent; and
  - regularly assess the noise monitoring data and modify or stop operations on the site to ensure compliance with the relevant conditions of this consent.

## Noise Management Plan

17. The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
  - describe the noise management system and measures to be implemented to ensure:
    - compliance with the noise criteria and operating conditions in this consent;
    - leading practice management is being employed;
    - noise impacts of the development are minimised during noise-enhancing meteorological conditions;

<sup>1</sup> Incorporates EPA GTA

<sup>2</sup> Incorporates EPA GTA

- c) include a protocol for distinguishing noise emissions of the development from other nearby or neighbouring developments; and
- d) include a monitoring program that:
  - is capable of evaluating the performance of the development against the construction and operational noise criteria;
  - monitors noise at the nearest and/or most affected residences or other representative monitoring locations set out in the Noise Management Plan;
  - adequately supports the noise management system; and
  - includes a protocol for identifying any noise-related exceedance, incident or non-compliance and notifying the Department and relevant stakeholders of any such event.

18. The Applicant must implement the Noise Management Plan as approved by the Planning Secretary.

## AIR QUALITY

### Air Quality Criteria

19. The Applicant must ensure that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 3 at any residence on privately-owned land.

Table 3: Air quality criteria

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a, c</sup> 25 µg/m <sup>3</sup>
	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>
Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	<sup>a, c</sup> 8 µg/m <sup>3</sup>
	24 hour	<sup>b</sup> 25 µg/m <sup>3</sup>
Total suspended particulate (TSP) matter	Annual	<sup>a, c</sup> 90 µg/m <sup>3</sup>

**Notes:**

<sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).

<sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own).

<sup>c</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Planning Secretary.

20. The air quality criteria in Table 3 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or infrastructure to exceed the air quality criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

### Air Quality Operating Conditions

- 20A. The Applicant must:
- a) take all reasonable steps to:
    - minimise odour, fume and particulate matter (including PM<sub>10</sub> and PM<sub>2.5</sub>) emissions of the development;
    - minimise visible off-site air pollution generated by the development; and
    - minimise the extent of potential dust generating surfaces exposed on the site at any given point in time;
  - b) operate an air quality management system to guide the day to day planning of quarrying operations and implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;
  - c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events;
  - d) carry out regular air quality monitoring to determine whether the development is complying with the relevant conditions in this consent; and
  - e) regularly assess meteorological and air quality monitoring data and relocate, modify or stop operations on the site to ensure compliance with the relevant conditions of this consent.

### Air Quality Management Plan

- 20B. The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;

- b) describe the measures to be implemented to ensure:
  - compliance with the air quality criteria and operating conditions in this consent;
  - leading practice management is being employed (including in respect of minimisation of greenhouse gas emissions from the site); and
  - air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;
- c) describe the air quality management system; and
- d) include an air quality monitoring program that:
  - is capable of evaluating the performance of the development against the air quality criteria;
  - adequately supports the air quality management system; and
  - includes a protocol for identifying any air quality-related exceedance, incident or non-compliance and notifying the Department and relevant stakeholders of any such event.

20C. The Applicant must implement the Air Quality Management Plan as approved by the Planning Secretary.

#### Odour

21. <sup>3</sup> The Applicant must not cause or permit the emission of offensive odour from the site.

*Note: 'Offensive odour' is defined in the Protection of the Environment Operations Act 1997.*

### SURFACE AND GROUND WATER

#### Water Supply

- 21A. The Applicant must ensure that it has sufficient water for all stages of the development prior to the take of water occurring, and if necessary, adjust the scale of the development to match its available water supply.
- 21B. The Applicant must report on water extracted from the site each year (direct and indirect) in the Annual Review, including water taken under each water licence.

*Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain all necessary water licences for the development.*

#### Pollution of Waters

22. Except as may be expressly provided by an EPL, the Applicant must comply with section 120 of the Protection of the Environment Operations Act 1997 during the carrying out of the development.

#### Water Discharge Limit

23. Except as may be expressly provided by an EPL, the Applicant must ensure that the discharges from any licenced discharge point/s do not cause additional exceedances of the criteria in Table 4:

*Table 4: Water Discharge Pollution Limits*

Pollutant	Unit of Measure	100 Percentile Concentration Limit
Total Suspended Solids	mg/L	50
pH	pH	± 1.0

#### Water Quality Objectives

24. The Applicant must ensure that water quality in the dredge ponds and in groundwater comply with the water quality objectives in Table 5, or other such level as approved by the Planning Secretary:

*Table 5: Water Quality Objectives*

Pollutant	Unit of Measure	Water Quality Objective
Turbidity	NTU	5-20
pH	pH	6.5 – 8.5
Salinity	µS/cm	<1,500
Dissolved oxygen	mg/L	>6
Total phosphorus	µg/L	5-50
Total nitrogen	µg/L	100-500

<sup>3</sup> Incorporates EPA GTA

Pollutant	Unit of Measure	Water Quality Objective
Chlorophyll-a	µg/L	2-10
Faecal coliforms	Median No./100mL	<1000
Enterococci	Median No./100mL	<230
Algae and blue-green algae	No.cells/mL	<15,000
Sodium	mg/L	400
Potassium ion	mg/L	50
Magnesium ion	mg/L	50
Chloride ion	mg/L	300
Sulphate ion	mg/L	250
Bicarbonate ion	mg/L	750
Soluble Iron ion	mg/L	6
Ammonium ion	mg/L	20

Notes:

- The objectives for dissolved oxygen, turbidity and algae are relevant to surface water only;
- The Department acknowledges that short term exceedances of these objectives may occur during natural events such as heavy rainfall or tidal saline water inflow.

### Stormwater Management

25. <sup>4</sup> The Applicant must ensure that any pond subject to dredging or backfilling, or containing turbid water due to recent dredging or backfilling, must be maintained and operated to prevent discharges of any turbid water (as defined in Tables 4 and 5) from these ponds.
26. <sup>5</sup> The Applicant must cease backfilling activities not less than 12 hours prior to the commencement of overflow from any dredge pond. No backfilling must occur when the dredge ponds are overflowing.

### Flood Management

27. The Applicant must ensure that the flood storage capacity of the site is no less than the pre-existing flood storage capacity at all stages of the development, unless otherwise approved in writing by the Planning Secretary. Details of the available flood storage capacity must be reported in the Annual Review.
28. <sup>6</sup>The access road entrance off Tabbita Road, processing and stockpile area, and the fines return pond(s) must be constructed and maintained so as to prevent inundation by floodwaters caused by the 1 in 100 year ARI flood level. Prior to the commissioning of the processing area, the Applicant must provide certification to the Planning Secretary that this condition has been complied with.
29. Following the cessation of dredging and backfilling operations, the Applicant must commission a suitably qualified hydrologist to define the flood-related limits of the final landform. The flood study must be undertaken in consultation with the Department and Shellharbour Council, and to the satisfaction of the Planning Secretary.

### Stage 5 Flood Mitigation

- 29A. Prior to undertaking any development in Stage 5A, the Applicant must provide the Planning Secretary with the detailed design of the Stage 5A flood mitigation bunds which demonstrates that the bunds can prevent inundation of the Stage 5A pond by floodwaters associated with the 1 in 100 year ARI flood level.
- 29B. Prior to undertaking any development in Stage 5B, the Applicant must provide the Planning Secretary with the detailed design of the Stage 5B flood mitigation bunds which demonstrates that the bunds can prevent inundation of the Stage 5B pond and carparking area by floodwaters associated with the probable maximum flood event. Any increase in the height of the bunds required to achieve this outcome must be accompanied by an appropriate increase in width to ensure the stability and visual aesthetics of the bunds in the landscape, to the satisfaction of the Secretary.
- 29C. The Applicant must retain and maintain the flood bunds around the Stage 5B area to prevent interactions with the probable maximum flood, unless otherwise agreed in writing by the Planning Secretary.

Upon receiving a written request from the Applicant seeking to remove the bunds, the Planning Secretary will determine whether the flood bunds should be removed and the Stage 5B pond rehabilitated and integrated into the Minnamurra River floodplain. If the water quality in the pond meets relevant ANZECC

<sup>4</sup> Incorporates EPA GTA

<sup>5</sup> Incorporates EPA GTA

<sup>6</sup> Incorporates EPA GTA

Guidelines, water quality standards imposed under any EPL and does not represent a material environmental risk to the Minnamurra River floodplain, the Planning Secretary will provide a written approval stipulating the timing and rehabilitation requirements associated with the removal of the bunds.

Alternatively, with the written approval of the Planning Secretary, the Applicant may satisfy its maintenance obligations under this condition through the establishment of a suitable funding agreement with an appropriate public authority. This public authority would then be responsible for the oversight and carriage of these in perpetuity works.

- 29D. The Applicant must undertake regular monitoring of the stability of flood bunds throughout the extraction, rehabilitation and closure phases of the Stage 5 quarry operations.

### Soil and Water Management Plan

30. The Applicant must prepare a Soil and Water Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
  - b) be prepared in consultation with EPA and DPIE Water; and
  - c) include a:
    - (i) **Site Water Balance** that includes details of:
      - predicted annual inflows to and outflows from the site;
      - sources and security of water supply for the life of the development (including authorised entitlements and licences);
      - water storage capacity, use and management on the site;
      - licenced discharge points and limits; and
      - reporting of annual water extraction and maximum instantaneous pumping rates to the Department; and
      - procedures for the annual preparation of an updated site water balance; and
    - (ii) **Erosion and Sediment Control Plan** that:
      - is consistent with the requirements of *Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book* (Landcom, 2004) and *Volume 2E: Mines and Quarries* (DECC, 2008);
      - identifies activities that could cause soil erosion, generate sediment or affect flooding;
      - includes a program to review the adequacy of existing flood protection works;
      - describes measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage flood risk;
      - describes the location, function, and capacity of erosion and sediment control structures and flood management structures; and
      - describes what measures would be implemented to maintain (or if necessary decommission) the structures over time;
    - (iii) **Surface Water Management Plan**, that includes:
      - detailed baseline data on surface water flows and quality in watercourses, water bodies, wetlands and/or fish habitat that could potentially be affected by the development;
      - a detailed description of the surface water management system on the site, including the:
        - clean water diversion system;
        - erosion and sediment controls;
        - dirty water management system; and
        - water storages;
      - a program to monitor and evaluate:
        - any surface water discharges;
        - bank and bed stability;
        - the effectiveness of the water management system;
        - impacts on water supply for other water users; and
        - surface water flows and quality in watercourses, waterbodies, wetlands and/or fish habitats that could potentially be impacted by the development;
      - surface water impact assessment criteria and performance measures, including trigger levels for investigating and responding to potentially adverse impacts; and
      - a protocol for identifying and investigating any exceedances of the surface water impact assessment criteria and for notifying the Department and relevant stakeholders of these events;
    - (iv) **Groundwater Management Plan** that includes:

- detailed baseline data of groundwater levels, flows and quality for groundwater resources and groundwater dependent ecosystems potentially impacted by the development;
  - a detailed description of the groundwater management system;
  - a program to monitor and evaluate:
    - water loss/seepage from water storages into the groundwater system, including from any final void;
    - groundwater inflows, outflows and storage volumes, to inform the Site Water Balance;
    - impacts on groundwater supply for other water users;
    - impacts on groundwater dependent ecosystems;
    - the hydrogeological setting of any nearby alluvial aquifers and the likelihood of any indirect impacts from the development; and
    - the effectiveness of the groundwater management system;
  - groundwater impact assessment criteria and performance measures, including trigger levels for investigating and responding to potentially adverse groundwater impacts (or trends) associated with the development on regional and local aquifers and/or the groundwater supply for other water users such as licensed privately-owned groundwater bores;
  - a protocol for identifying and investigating any exceedances of the groundwater performance criteria and for notifying the Department and relevant stakeholders of these events; and
  - a protocol to obtain appropriate water licence(s) to cover the volume of any unforeseen groundwater inflows into the extraction areas.
31. The Applicant must implement the Soil and Water Management Plan approved by the Planning Secretary.
32. The Applicant must not commence extraction in Stage 5 until the Soil and Water Management Plan is approved by the Planning Secretary.

#### **Stage 5 Acid Sulfate Soils Management**

33. Prior to commencing extraction in Stage 5, the Applicant must prepare an Acid Sulfate Soils Management Plan for Stage 5 operations, to the satisfaction of the Planning Secretary. The plan must:
- a) be prepared in consultation with EPA and by a suitably qualified person whose appointment has been approved by the Planning Secretary;
  - b) describe the measures that would be implemented to limit the risk of acid sulfate soils being mobilised during Stage 5 operations;
  - c) describe the measures that would be implemented to limit the risk of acid sulphate soils being imported with the VENM; and
  - d) include a Trigger Action Response Plan with a hierarchy of actions to avoid, mitigate and manage acid sulfate soils impacts.
34. *Deleted*
35. *Deleted*

#### **METEOROLOGICAL MONITORING**

36. Prior to the commencement of construction within the Stage 5 areas and for the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in close proximity to the site that:
- a) complies with the requirements in the *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales* (DEC, 2007); and
  - b) is capable of measuring meteorological conditions in accordance with the *NSW Noise Policy for Industry* (EPA, 2017), unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.

#### **BIODIVERSITY**

##### **Endangered Ecological Community Compensatory Habitat**

37. **The Applicant must** establish, conserve and maintain at least:
- a) 6 ha of Freshwater Wetlands on Coastal Floodplains (which may include areas of associated wetland pondage); and
  - b) 3 ha of Swamp Oak Floodplain Forest;
- in rehabilitation and visual screening plantings on the site, in a manner that integrates the compensatory habitats with existing similar habitats on and near the site.

## Stage 5 Biodiversity Offsets

- 37A. Prior to any clearing of vegetation in Stage 5B, or other timeframe agreed by the Planning Secretary, the Applicant must retire the biodiversity credits listed in Table 6. The retirement of credits must be carried out in accordance with the Biodiversity Offsets Scheme of the BC Act, to the satisfaction of the BCT.

Table 6: Stage 5 Biodiversity credit requirements

Credit Type	Credits Required
<b>Ecosystem Credits</b>	
Bangalay Sand Forest of the Sydney Basin and South East Corner Bioregions ( <i>PCT659 – Bangalay – Old-man Banksia open forest on coastal sands, Sydney Basin Bioregion and South East Corner Bioregion</i> )	71
<b>Species Credits</b>	
Southern Myotis ( <i>Myotis Macropus</i> )	19
Masked Owl ( <i>Tyto novaehollandiae</i> )	71
Barking Owl ( <i>Ninox connivens</i> )	71

## Flora and Fauna Management Plan

38. Prior to undertaking any vegetation clearing associated with Modification 2, the Applicant must update the Flora and Fauna Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- a) be prepared by suitably qualified ecologist and experienced person/s whose appointment has been endorsed by the Planning Secretary;
  - b) be prepared in consultation with Shellharbour Council, Kiama Council and Fisheries NSW;
  - c) describe the short, medium and long-term measures to be undertaken to manage remnant vegetation and fauna habitat on the site;
  - d) describe the measures to be implemented within the approved disturbance areas to:
    - (i) minimise the amount of clearing where practicable (eg through adaptive management of ancillary infrastructure) and delineate the areas of vegetation to be cleared;
    - (ii) ensure that clearing is undertaken progressively;
    - (iii) minimise impacts on fauna, including undertaking pre-clearance surveys;
    - (iv) provide for the reasonable salvage, transplanting and/or propagation of threatened flora found during pre-clearance surveys, in accordance with the *Guidelines for the Translocation of Threatened Plants in Australia* (Vallee et al., 2004); and
    - (v) maximise the salvage of resources, including tree hollows, vegetation and soil resources, for beneficial reuse, including fauna habitat enhancement;
  - e) describe the measures to be implemented on the site to:
    - (i) minimise impacts to threatened ecological communities listed under the BC Act and contribute to conservation strategies for these communities;
    - (ii) minimise impacts on fauna habitat resources such as hunting and foraging areas, habitat trees, fallen timber, hollow-bearing trees and downstream fish habitats;
    - (iii) enhance the quality of vegetation, vegetation connectivity and wildlife corridors including through the revegetation of appropriate canopy, sub-canopy, understorey and ground strata within the wetland vegetation to be established around the pond verges;
    - (iv) introduce naturally scarce fauna habitat features such as nest boxes and salvaged tree hollows in the final landform and promote the use of these introduced habitat features by threatened fauna species;
    - (v) manage any potential conflicts with Aboriginal heritage values;
    - (vi) protect vegetation and fauna habitat outside of the approved disturbance areas;
    - (vii) manage the collection and propagation of seed from the local area;
    - (viii) control weeds, including measures to avoid and mitigate the spread of noxious weeds;
    - (ix) control feral pests with consideration of actions identified in relevant threat abatement plans;
    - (x) control erosion;
    - (xi) manage any grazing and agriculture;

- (xii) control access to vegetated or revegetated areas; and
- (xiii) manage bushfire hazards;
- f) include a seasonally based program to monitor and report on the effectiveness of the above measures, progress against the detailed performance indicators and completion criteria, and identify any improvements that could be implemented to improve biodiversity outcomes;
- g) include a Compensatory Habitat Management Plan that:
  - (i) describes the compensatory habitat proposal;
  - (ii) justifies why the proposed area(s) is suitable for the compensatory habitat proposal, including how the area will integrate with existing habitat areas on and near the site;
  - (iii) establishes baseline data for the existing habitat in the proposed area(s);
  - (iv) describes how the compensatory habitat proposal would be implemented;
  - (v) sets completion criteria for the compensatory habitat proposal; and
  - (vi) describes how the performance of the compensatory habitat proposal would be monitored over time;
- h) include detailed performance and completion criteria for evaluating the performance of the compensatory habitat and offset requirements of conditions 37 and 37A and rehabilitation of the site, including triggers for remedial action, where these performance or completion criteria are not met; and
- i) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

39. The Applicant must implement the Biodiversity Management Plan as approved by the Planning Secretary.

## HERITAGE

### Protection of Heritage Items

40. The Applicant must ensure that the development does not cause any direct or indirect impact on any identified heritage item located outside of the approved disturbance areas, beyond those impacts predicted in the documents listed in condition 2(c) of Schedule 2.

### Heritage Management Plan

41. Prior to undertaking any development in Stage 5, the Applicant must prepare a Heritage Management Plan for the development to the satisfaction of the Planning Secretary. This Plan must:
- a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Planning Secretary;
  - b) be prepared in consultation with Registered Aboriginal Parties and Heritage NSW;
  - c) include consideration of the Aboriginal and non-Aboriginal cultural context and significance of the site;
  - d) describe the procedures and management measures to be implemented on the site to:
    - (i) ensure all workers receive suitable Aboriginal cultural heritage inductions prior to carrying out any activities which may cause impacts to Aboriginal objects or Aboriginal places, and that suitable records are kept of these inductions;
    - (ii) protect, monitor and manage identified non-Aboriginal heritage, Aboriginal objects and Aboriginal places (including any archaeological investigations of potential subsurface objects and salvage of objects within the approved disturbance areas, including 52-5-0907 (DLS Boral AFT 1) and 52-5-0908 (DLS Boral AFT 2) in accordance with the commitments made in the documents listed in condition 2(c) of Schedule 2;
    - (iii) protect non-Aboriginal heritage, Aboriginal objects and Aboriginal places located outside the approved disturbance area from impacts of the development;
    - (iv) manage the discovery of suspected human remains and any new Aboriginal objects or Aboriginal places, including provisions for burials, over the life of the development;
    - (v) maintain and manage reasonable access for relevant Aboriginal stakeholders to Aboriginal objects and Aboriginal places (outside of the approved disturbance area); and
    - (vi) facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site;
  - e) include a strategy for the care, control and storage of Aboriginal objects salvaged on site, both during the life of the development and in the long term;
  - f) include a protocol for managing interactions with the curtilage of the State heritage listed Dunmore House and identifying how this area would be rehabilitated to ensure the Dunmore House curtilage is restored without impacting the integrity or heritage values of the site; and
  - g) describe the measures to be implemented on the site to manage interactions with the Flora and Fauna Management Plan.



41A. The Applicant must implement the Heritage Management Plan approved by the Planning Secretary.

## REHABILITATION

### Rehabilitation

42. The Applicant must progressively rehabilitate the site to the satisfaction of the Planning Secretary, in a manner that is generally consistent with the concept final landform in the documents listed in condition 2(c) of Schedule 2 (see Appendix 2), and in accordance with the conditions of this consent.

### Rehabilitation Management Plan

43. Prior to commencing extraction in Stage 5, the Applicant must update the Rehabilitation Management Plan for the development to the satisfaction of the Planning Secretary: This plan must:
- a) be prepared:
    - (i) by suitably qualified consultants, including a specialist hydrologist, wetlands ecologist and landscape architect, whose appointments have been approved by the Planning Secretary;
    - (ii) in consultation with Shellharbour Council, Kiama Council, BCD and the Department; and
    - (iii) in accordance with extant guidelines including the *Constructed Wetlands Manual, Volumes 1 & 2* and the *Shellharbour Visual Management Plan User Manual*;
  - b) provide detailed plans of the final landform based on current backfill estimates;
  - c) set detailed performance indicators and completion criteria for the rehabilitation of all areas disturbed by the development;
  - d) describe the measures that would be implemented to achieve the criteria in paragraph (c) and triggers for remedial actions;
  - e) include detailed design plans and scheduling for progressive rehabilitation to be initiated, undertaken and/or completed in the next 5 years;
  - f) include a program to monitor, independently audit and report on progress against the criteria in paragraph (c) and the effectiveness of the measures in paragraph (d); and
  - g) include any Riparian Area Management Plan/s prepared in accordance with condition 45 for those riparian areas to be disturbed/rehabilitated in the next 5 years.
44. The Applicant must implement the Rehabilitation Management Plan as approved by the Planning Secretary.

### Riparian Area Management Plan

45. The Applicant must prepare a Riparian Area Management Plan in consultation with BCD and to the satisfaction of the Planning Secretary. For works involving:
- a) disturbance within 3m of an existing riparian area, the plan must:
    - describe the broader extraction staging and justify the need for extraction in the Riparian Area;
    - describe in detail the methods and timing for extraction within the Riparian Area;
    - provide for construction and stabilisation of appropriate diversion channels to divert the waterbody around the disturbance area, unless otherwise approved by BCD and the Planning Secretary; and
    - describe the methods for rehabilitation of the Riparian Area and diversion channels; and
  - b) construction/rehabilitation of Riparian Areas, the plan must:
    - detail proposed channel/bed designs, including scour protection measures;
    - include hydraulic modelling supporting the proposed design;
    - where applicable, include measures to replicate pre-existing tidal-estuarine conditions;
    - include detailed plans for rehabilitation and revegetation of the Riparian Area using locally endemic species;
    - describe measures for the protection, enhancement and integration with adjacent threatened communities, including *Freshwater Wetlands on Coastal Floodplains*, *Swamp Oak Floodplain Forest* and *Bangalay Sand Forest of the Sydney Basin and South East Corner Bioregions*.
46. The Applicant must implement the Riparian Area Management Plan as approved by the Planning Secretary.
47. Deleted

### Rehabilitation and Conservation Bond

48. Within 6 months of the approval of Modification 2, the Applicant must lodge an updated Conservation and Rehabilitation Bond with the Department to ensure that the biodiversity offset, compensatory habitat and rehabilitation requirements of the site are implemented in accordance with the performance and

completion criteria set out in the Flora and Fauna Management Plan, Rehabilitation Management Plan and the relevant conditions of this consent. The sum of the bond must be an amount agreed by the Planning Secretary and determined by:

- a) calculating the full cost of implementing the biodiversity offset and compensatory habitat requirements of the consent at third party rates (other than land acquisition costs);
- b) calculating the cost of rehabilitating all disturbed areas of the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and
- c) employing a suitably qualified, independent and experienced person to verify the calculated costs.

49. The calculation of the Conservation and Rehabilitation Bond must be submitted to the Department for approval at least 2 months prior to the lodgement of the bond.
- 49A. The Conservation and Rehabilitation Bond must be reviewed and if required, an updated bond must be lodged with the Department within 3 months following:
  - a) any update or revision to the Flora and Fauna, Rehabilitation or Riparian Area Management Plans;
  - b) the completion of an Independent Environmental Audit in which recommendations relating to the implementation of the biodiversity or rehabilitation requirements have been made; or
  - c) in response to a request by the Planning Secretary.
- 49B. If the biodiversity offset, compensatory habitat and rehabilitation requirements are completed generally in accordance with the relevant performance and completion criteria, to the satisfaction of the Planning Secretary, the Planning Secretary will release the bond.
- 49C. If the Biodiversity Offset Strategy or rehabilitation is not completed generally in accordance with the relevant performance and completion criteria, the Planning Secretary will call in all, or part of, the bond, and arrange for the completion of the relevant works.

## LONG TERM MANAGEMENT

### Long Term Management Strategy

50. Within 12 months of the date of this consent **the Applicant must** prepare a Long Term Management Strategy for the site to the satisfaction of the **Planning Secretary**. The strategy must:
  - a) **be prepared in consultation with Shellharbour Council, Kiama Council and the CCC;**
  - b) define the objectives and criteria for quarry closure and post-extraction management;
  - c) investigate options for the future use of the site;
  - d) describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the development; and
  - e) describe how the performance of these measures would be monitored over time.

*Note: The Long Term Management Strategy may be prepared as part of the Rehabilitation Management Plan.*

51. Within 3 years of providing the Long Term Management Strategy to the **Planning Secretary**, and every 4 years thereafter, **the Applicant must** review and update the strategy to the satisfaction of the **Planning Secretary**.

### Long Term Management Trust

52. Within 4 years of the date of this consent **the Applicant must** establish a trust fund (or other mechanism as agreed by the **Planning Secretary**), that has available by the end of year 20 a minimum of \$300,000 for the long term management of the site, to the satisfaction of the **Planning Secretary**. Every 4 years following establishment of the trust, **the Applicant must** review, and if necessary revise, the trust sum to the satisfaction of the **Planning Secretary**. This review must consider:
  - a) the effects of inflation;
  - b) any changes to the total area of disturbance; and
  - c) the performance of the rehabilitation to date.

## TRAFFIC AND TRANSPORT

### North Kiama Bypass

53. **The Applicant must** not undertake any product despatch from the **development** until the completion of the 'Stage 2 – Kiama Bypass' by the **TfNSW**.

*Note: 'Stage 2' refers to the north bound traffic carriageway due for completion in late 2005.*

## Stage 5 Access

- 53A. Prior to any heavy vehicle access to the Stage 5 extraction areas, the Applicant must construct a channelised right turn intersection with appropriate line marking from Riverside Drive to the Stage 5A extraction area, to the satisfaction of the relevant roads authority and in accordance with the AustRoads *Guide to Road Design Part 4: Intersections and Crossings –General*.

## Road Pavement Dilapidation Report

- 53B. Prior to the construction of the intersection upgrade described in Condition 53A, the Applicant must:
- undertake a pre-construction road pavement survey for the section of Riverside Drive that would be subject to heavy vehicle movements associated with the development;
  - identify the likely risk of road pavement failure on Riverside Drive associated with the development;
  - prepare a post-dilapidation survey of the section of Riverside Drive that would be subject to heavy vehicle movements associated with the development within 1 month of the completion of VENM haulage to the Stage 5 area, or other timeframe agreed by the applicable roads authority; and
  - rehabilitate and/or make good any development-related damage identified in the post-dilapidation survey prepared under paragraph (c) within 3 months of completing the post-dilapidation survey, or other timing as may be agreed by the applicable roads authority, to the satisfaction of the applicable roads authority.
- 53C. If there is a dispute about the scope of any remedial works or the implementation of works required under condition 53B, then either party may refer the matter to the Planning Secretary for resolution.

## Works within the Road Reserve

- 53D. Prior to the construction of the pipeline within the within the Princes Highway road reserve (including within the culvert), the Applicant must enter into a legally binding agreement with TfNSW, for the construction, operation and decommissioning of the pipeline. The Applicant must pay for the drafting and execution of this legally binding agreement.
- 53E. The applicant must obtain a Section 138 consent under the *Roads Act 1993* from TfNSW for works associated within the pipeline within the Princes Highway road reserve.

## Parking

54. **The Applicant must** provide sufficient parking on-site for all quarry-related traffic, in accordance with Shellharbour Council's parking codes, and to the satisfaction of the **Planning Secretary**. All vehicular and pedestrian facilities **must** be in accordance with the TfNSW's *Guide to Traffic Generating Developments*.

## Transport Operating Conditions

55. The Applicant must:
- keep accurate records of all laden truck movements and rail transport to and from the site (including time of arrival and dispatch);
  - ensure that all laden trucks and trains entering or exiting the site have their loads covered;
  - ensure that all laden trucks exiting the site are cleaned of material that may fall from vehicles, before leaving the site;
  - take all reasonable steps to minimise traffic safety issues and disruption to local road users; and
  - take all reasonable steps to ensure that appropriate signage is displayed on all trucks used to transport quarry products from the development so they can be easily identified by other road users.

## Traffic Management Plan

56. Prior to undertaking any construction transportation activities relating to Modification 2, the Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
  - be prepared in consultation with TfNSW, Shellharbour Council and Kiama Council;
  - include details of all transport routes and traffic types to be used for development-related traffic;

- d) describe the processes in place for the control of truck movements entering and exiting the site;
- e) include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users associated with quarry operations;
- f) detail the specific protocols to be observed for the construction of ancillary site infrastructure and site preparation works, including hours of operation, traffic controls and mitigation measures to ensure traffic on Riverside Drive is not significantly impeded by site traffic during construction;
- g) include a Drivers' Code of Conduct that includes procedures to ensure that drivers:
  - (iv) adhere to posted speed limits or other required travelling speeds;
  - (v) adhere to designated transport routes; and
  - (vi) implement safe and quiet driving practices;
- h) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct;
- i) propose measures to minimise the transmission of dust and tracking of material onto the surface of public roads from vehicles exiting the site;
- j) propose measures (such as the installation of inclinometers) to monitor detect any ground movement adjacent to the Princes Highway as a result of the extraction in Stage 5B; and
- k) outline the procedures that would be implemented to respond to and address any material ground movements detected under paragraph (j) and demonstrate the long-term stability and safety of stage 5B extraction area on the Princess Highway road reserve.

56A. The Applicant must implement the Traffic Management Plan as approved by the Planning Secretary.

#### Rail Transport

- 57. The Applicant must maximise the use of rail transport for delivery/despatch outside the Illawarra Region, to the satisfaction of the Planning Secretary. Details of transportation modes and measures to assess and encourage rail transport must be provided in the Annual Review.

#### VISUAL IMPACT

- 58. The Applicant must minimise the visual impacts of the development to the satisfaction of the Planning Secretary.

#### Tree Screens

- 59. Prior to the commencement of any works, the Applicant must establish and subsequently maintain a tree screen along the eastern boundary (and northeastern and southeastern boundaries) of Stages 2-4, to the satisfaction of the Planning Secretary.
- 60. Within 2 months of completing construction of the processing area, the Applicant must establish and subsequently maintain a tree screen around the processing area to the satisfaction of the Planning Secretary.

#### Landscaping Plan

- 61. The Applicant must establish the tree screens identified in conditions 59 and 60 in accordance with a Landscaping Plan that has been prepared in consultation with Shellharbour Council and Kiama Council, and to the satisfaction of the Planning Secretary. The plan must be prepared by a suitably qualified ecologist/landscape architect and must:
  - a) be prepared in accordance with the *Shellharbour Visual Management Plan User Manual*;
  - b) comprise a full range of Swamp Oak Floodplain Forest species;
  - c) provide for the planting of trees of sufficient maturity that will ensure the prompt screening of the site;
  - d) provide for a sufficient planting width and density to ensure that the site will be effectively screened when viewed from the Princes Highway and residential areas.

#### Lighting Emissions

- 62. The Applicant must take all practicable measures to prevent and/or minimise any off-site lighting impacts from the development.
- 63. All external lighting associated with the development must comply with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*.

## WASTE MANAGEMENT

### Waste Minimisation

64. The Applicant must
- manage on-site sewage treatment and disposal in accordance with the requirements of an applicable EPL, and to the satisfaction of EPA and Shellharbour Council;
  - minimise the waste generated by the development;
  - ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and
  - report on waste minimisation and management in the Annual Review.

### Backfilling Material

65. <sup>7</sup> The Applicant must use VENM for the purpose of void backfilling.

*Note: The definition of VENM may include soil that has been assessed by a certified practicing soil scientist in accordance with the Acid Sulfate Soil Management Advisory Council guidelines and determined to be Potential Acid Sulfate Soil (PASS) and which satisfies all of the requirements for classification as VENM, except that it contains sulfidic soils, that has been approved by EPA for disposal on the site, and that is managed in accordance with the procedures in the EPL for the development.*

66. <sup>8</sup>Backfilling of the voids must be undertaken in a manner, and with material with suitable physical characteristics, so that it does not significantly affect the direction or rate of groundwater flow from the site.
67. <sup>9</sup>All fines separated from the dredged sand must be placed below the permanent water table within 12 hours of processing the dredged sand.

### VENM Receipt and Processing

- 67A. The Applicant must not process and/or blend more than 120,000 tonnes of VENM per annum.
- 67B. Except as expressly permitted in an applicable EPL, specific resource recovery order or exemption under the *Protection of the Environment Operations (Waste) Regulation 2014*, the Applicant must not receive waste at the site for storage, treatment, processing or reprocessing.

### Waste Management Plan

68. <sup>10</sup>Within 12 months of the date of this consent the Applicant must prepare and subsequently implement a Waste Management Plan for the development, in consultation with EPA, and to the satisfaction of the Planning Secretary. The plan must include:
- VENM receipt and acceptance, processing and blending procedures;
  - procedures for the management of fines from the processing plant;
  - procedures for managing potential acid sulfate soils; and
  - procedures for minimising and managing other wastes generated by the development.

- 68A. The Applicant must implement the Waste Management Plan as approved by the Planning Secretary.

## BUSHFIRE MANAGEMENT

69. The Applicant must:
- ensure that the development:
    - provides for asset protection in accordance with the relevant requirements in the *Planning for Bushfire Protection* (RFS, 2019) guideline; and
    - ensure that there is suitable equipment to respond to any fires on the site; and
  - assist the RFS and emergency services to the extent practicable if there is a fire in the vicinity of the site.

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<sup>7</sup> Incorporates EPA GTA

<sup>8</sup> Incorporates EPA GTA

<sup>9</sup> Incorporates EPA GTA

<sup>10</sup> Incorporates EPA GTA

## EMERGENCY AND HAZARDS MANAGEMENT

### Dangerous Goods

70. [The Applicant must](#) ensure that the storage, handling, and transport of dangerous goods is conducted in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code.

### Safety

71. [The Applicant must](#) secure the development to ensure public safety to the satisfaction of the [Planning Secretary](#).

## PRODUCTION DATA

72. [The Applicant must](#):
- a) provide annual production data to the [MEG](#) using the standard form for that purpose; and
  - b) include a copy of this data in the [Annual Review](#).

## SCHEDULE 4 ADDITIONAL PROCEDURES

### ADDITIONAL MITIGATION UPON REQUEST

1. Upon receiving a written request from the owner of any residence on the land listed in Table 7, the Applicant must implement additional noise mitigation measures (such as double-glazing, insulation and/or air conditioning) at the residence in consultation with the landowner.

*Table 7: Land subject to additional mitigation upon request*

<b>Mitigation Basis</b>	<b>Land</b>
Noise	79 Fig Hill Lane, Dunmore

*Note: To interpret the land referred to in Table 7, see the applicable figure in Appendix 3.*

These measures must be reasonable and feasible, consistent with the measures outlined in the *Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Development (NSW Government, 2014)*, proportionate to the level of predicted impact and directed towards reducing the noise impacts of the development.

2. If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.

### NOTIFICATION OF LANDOWNERS/TENANTS

3. Within one month of the date of this consent, the Applicant must notify in writing the owner of the residences on the land listed in Table 7 that they are entitled to ask the Applicant to install additional mitigation measures at the residence.
4. Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, the Applicant must:
  - a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the fact sheet entitled "Mine Dust and You" (NSW Health, 2017); and
  - b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Planning Secretary.

### NOTIFICATION OF EXCEEDANCES

5. As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any noise or air quality criterion in Schedule 3 of this consent, the Applicant must provide the details of the exceedance to any affected landowners, tenants and the CCC.
6. For any exceedance of any air quality criterion in Schedule 3 of this consent, the Applicant must also provide to any affected land owners and/or tenants a copy of the fact sheet entitled "Mine Dust and You" (NSW Health, 2017).

### INDEPENDENT REVIEW

7. If a landowner considers the development to be exceeding any relevant noise or air quality criterion in Schedule 3 of this consent, they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their residence or land.
8. If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.
9. If the Planning Secretary is satisfied that an independent review is warranted, within 3 months, or other timeframe agreed by the Planning Secretary and the landowner, of the Planning Secretary's decision, the Applicant must:
  - a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to:
    - (i) consult with the landowner to determine their concerns;
    - (ii) conduct monitoring to determine whether the development is complying with the relevant criterion in Schedule 3 of this consent; and

- (iii) if the development is not complying with the relevant criterion, identify measures that could be implemented to ensure compliance with the relevant criterion; and
- b) give the Planning Secretary and landowner a copy of the independent review; and
- c) comply with any written requests made by the Planning Secretary to implement any findings of the review.



**SCHEDULE 5**  
**ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING**

**ENVIRONMENTAL MANAGEMENT**

**Environmental Management Strategy**

1. If the **Planning Secretary** requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the **Planning Secretary**. This strategy must:
  - a) be submitted to the **Planning Secretary** for approval within 6 months of the **Planning Secretary** requiring preparation of the strategy by notice to the Applicant;
  - b) provide the strategic framework for the environmental management of the development;
  - c) identify the statutory approvals that apply to the development;
  - d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
  - e) describe the procedures that would be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
    - receive, handle, respond to, and record complaints;
    - resolve any disputes that may arise during the course of the development;
    - respond to any non-compliance and any incident; and
    - respond to emergencies; and
  - f) include:
    - references to any strategies, plans and programs approved under the conditions of this development consent; and
    - a clear plan depicting all the monitoring to be carried out under the conditions of this consent.
  
- 1A. The Applicant must implement the Environmental Management Strategy as approved by the **Planning Secretary**.

**Management Plan Requirements**

2. The Applicant must ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include:
  - a) detailed baseline data;
  - b) a description of:
    - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - any relevant limits or performance measures/criteria; and
    - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
  - c) any relevant commitments or recommendations identified in the document/s listed in condition 2(c) of Schedule 2;
  - d) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;
  - e) a program to monitor and report on the:
    - impacts and environmental performance of the development; and
    - effectiveness of any management measures (see (c) above);
  - f) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
  - g) a program to investigate and implement ways to improve the environmental performance of the development over time;
  - h) a protocol for managing and reporting any:
    - incidents;
    - complaints;
    - non-compliances with statutory requirements; and
    - exceedances of the impact assessment criteria and/or performance criteria; and
  - i) a protocol for periodic review of the plan.

*Note: The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*

**Revision of Strategies, Plans & Programs**

3. Within 3 months of:
  - a) the submission of an incident report under condition 7 below;
  - b) the submission of an Annual Review under condition 9 below;
  - c) the submission of an audit report under condition 10 below; and
  - d) the approval of any modifications to this consent (unless the conditions require otherwise),the Applicant must review the suitability of existing strategies, plans, and programs required under this consent.

4. If necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans, and programs required under this consent must be revised, to the satisfaction of the Planning Secretary and submitted to the Planning Secretary for approval within six weeks of the review.

*Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.*

#### **Adaptive Management**

5. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:

- a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;
- b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- c) implement remediation measures as directed by the Planning Secretary, to the satisfaction of the Planning Secretary.

#### **COMMUNITY CONSULTATIVE COMMITTEE**

6. The Applicant must operate a Community Consultative Committee (CCC) for the development, to the satisfaction of the Planning Secretary. This CCC must be operated in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version)

*Notes:*

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*
- *In accordance with the guideline, the committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, and the local community.*
- *The requirement for this CCC may be fulfilled by a regional CCC for any two or more of Boral's quarrying operations in the South Coast area.*

#### **REPORTING**

##### **Incident Notification**

7. The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing through the Department's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.

##### **Non-Compliance Notification**

- 7A. Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing through the Department's Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

*Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.*

##### **Regular Reporting**

8. The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

#### **ANNUAL REVIEW**

9. By the end of September each year, or other timing as may be agreed by the Planning Secretary, the Applicant must review the environmental performance of the development to the satisfaction of the Planning Secretary. This review must:
  - a) describe the development (including rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;
  - b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against:
    - the relevant statutory requirements, limits or performance measures/criteria;

- requirements of any plan or program required under this consent;
  - the monitoring results of previous years; and
  - the relevant predictions in the documents listed in condition 2(c) of Schedule 2;
- c) identify any non-compliance or incident which occurred in the previous financial year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;
- d) evaluate and report on:
- the effectiveness of the noise and air quality management systems; and
  - compliance with the performance measures, criteria and operating conditions of this consent;
- e) identify any trends in the monitoring data over the life of the development;
- f) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
- g) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.

The Applicant must ensure that copies of the Annual Review are submitted to the Planning Secretary and Council and are available to the Community Consultative Committee (see condition 6 of Schedule 5) and any interested person upon request.

#### **INDEPENDENT ENVIRONMENTAL AUDIT**

10. By 30 September 2017, and every 3 years thereafter, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
- a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary;
  - b) include consultation with the relevant agencies and the CCC;
  - c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licence (including any assessment, plan or program required under these approvals);
  - d) review the adequacy of any approved strategy, plan or program required under these approvals; and
  - e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals.

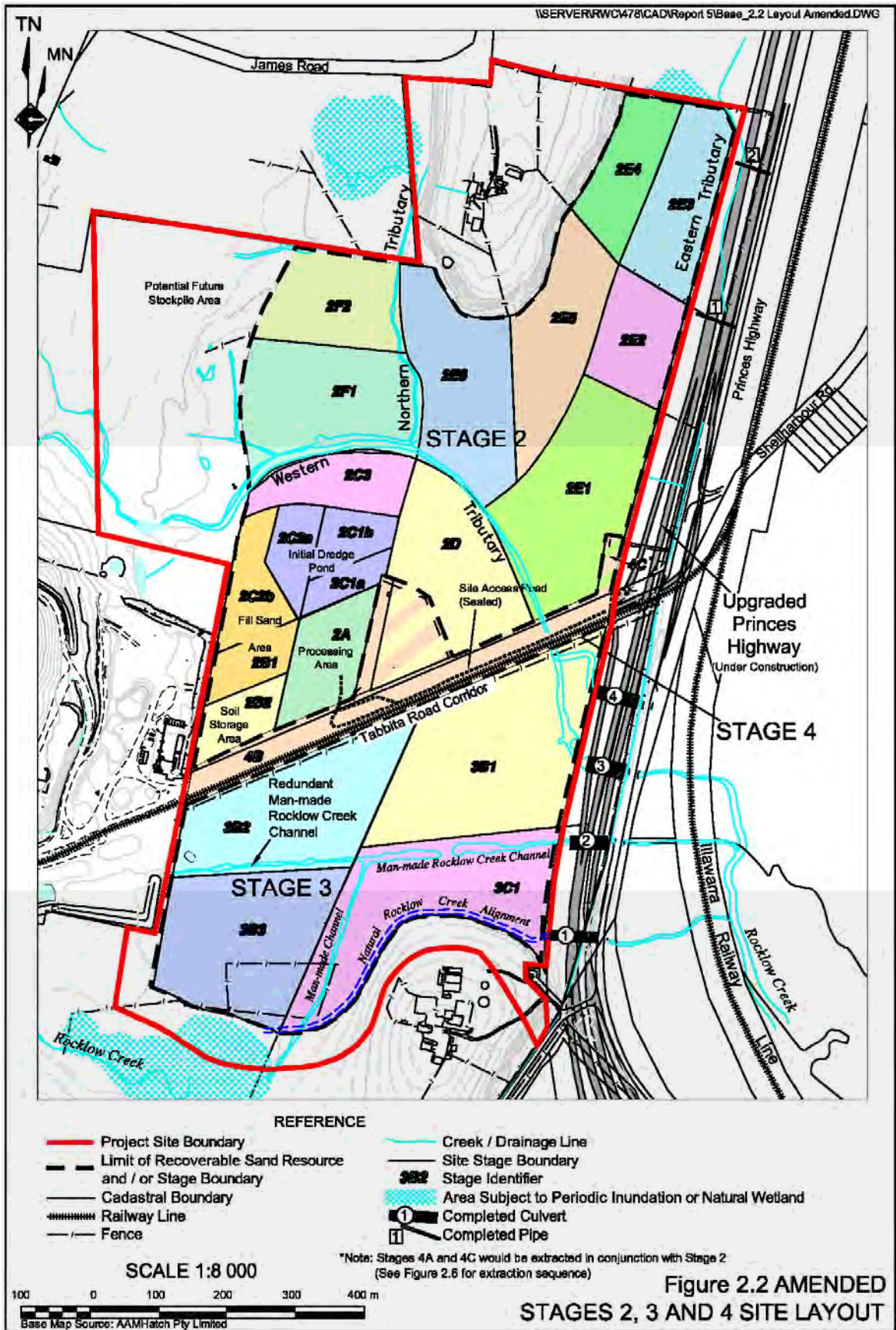
*Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Planning Secretary.*

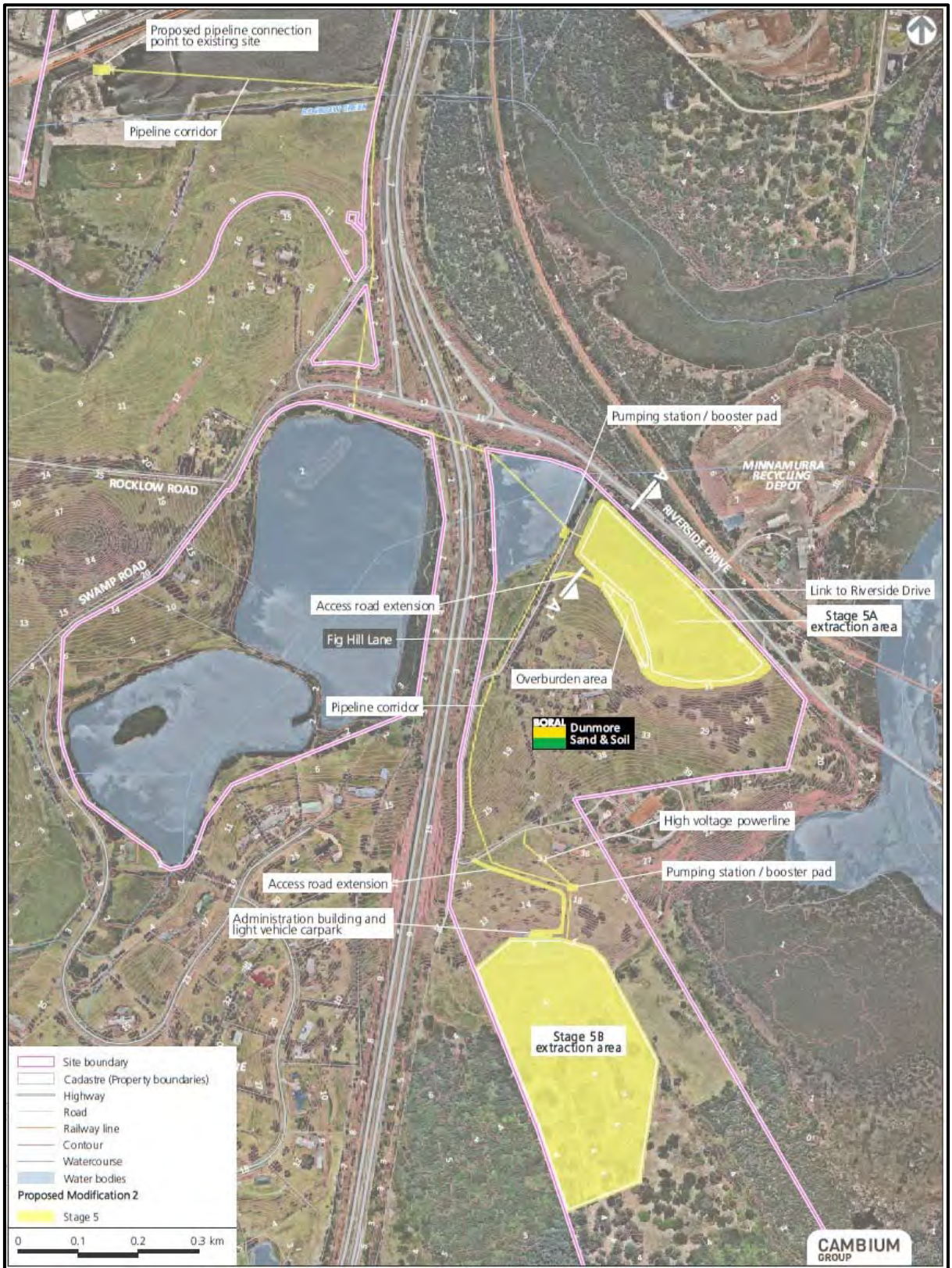
11. Within 6 weeks of commissioning this audit, or as otherwise agreed by the Planning Secretary, the Applicant must submit a copy of the audit report to the Planning Secretary, Council, EPA and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Planning Secretary.

#### **ACCESS TO INFORMATION**

12. By 30 November 2016, unless otherwise agreed by the Planning Secretary, the Applicant must:
- a) make the following information publicly available on its website:
    - the documents listed in condition 2(c) of Schedule 2;
    - current statutory approvals for the development;
    - approved strategies, plans or programs;
    - a summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;
    - minutes of CCC meetings;
    - a summary of the current phase and progress of the development;
    - contact details to enquire about the development or to make a complaint;
    - a complaints register, which is to be updated on a monthly basis;
    - the Annual Reviews of the development;
    - reports prepared as part of any independent environmental audit, and the Applicant's response to the recommendations in any audit report;
    - any other matter required by the Planning Secretary; and
  - b) keep this information up-to-date,
- to the satisfaction of the Planning Secretary.

**APPENDIX 1**  
**DEVELOPMENT LAYOUT PLAN**





APPENDIX 2  
CONCEPT FINAL LANDFORM

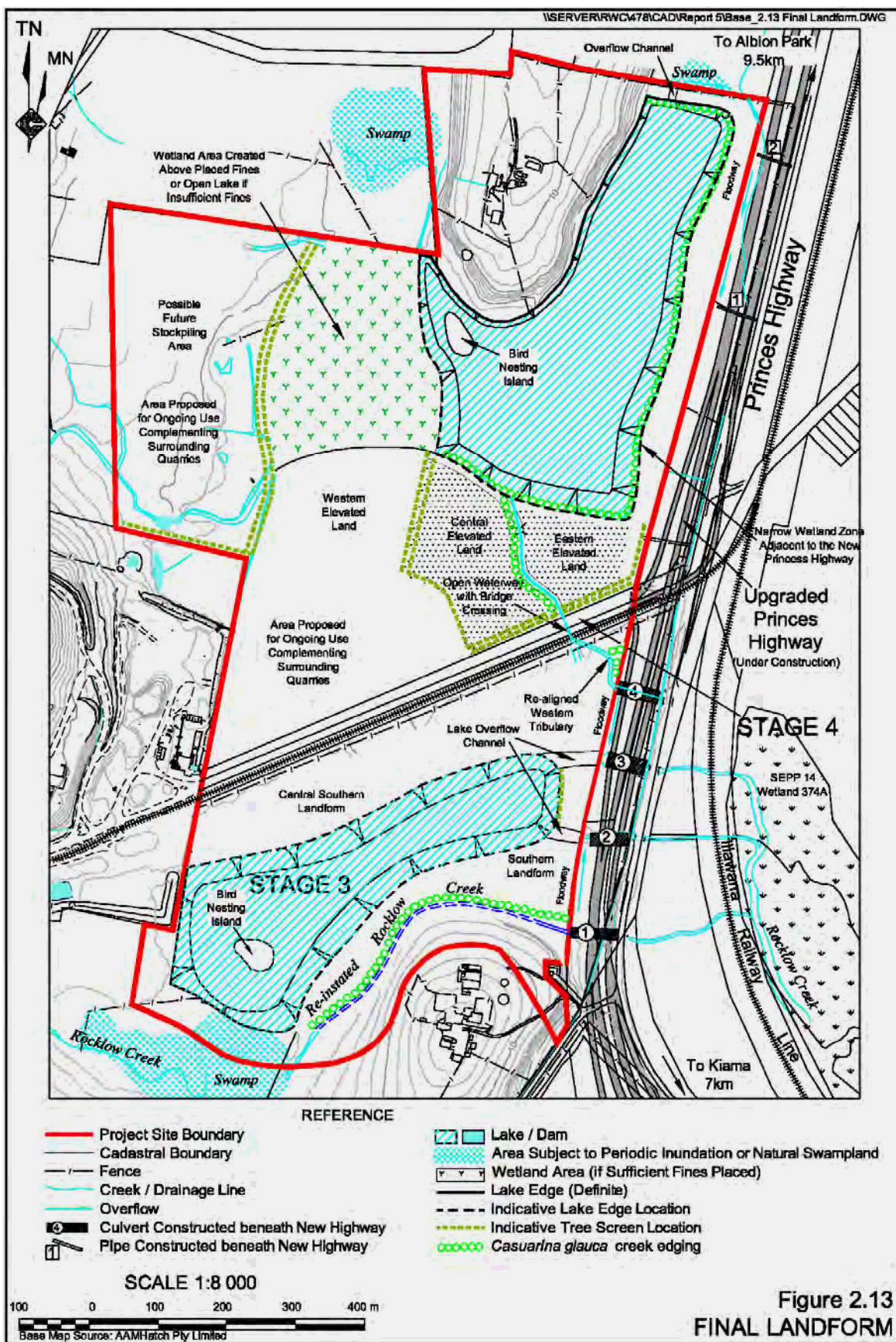
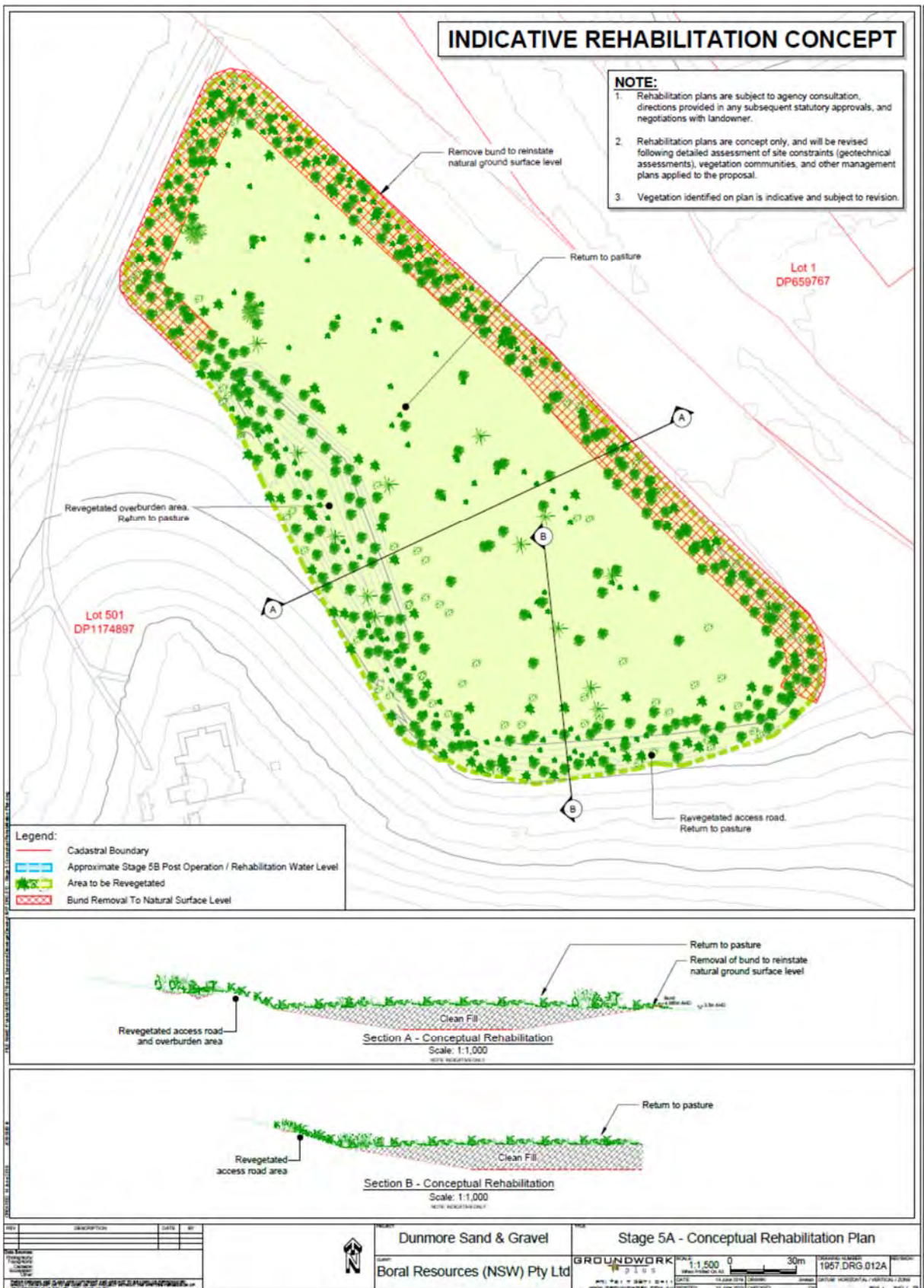
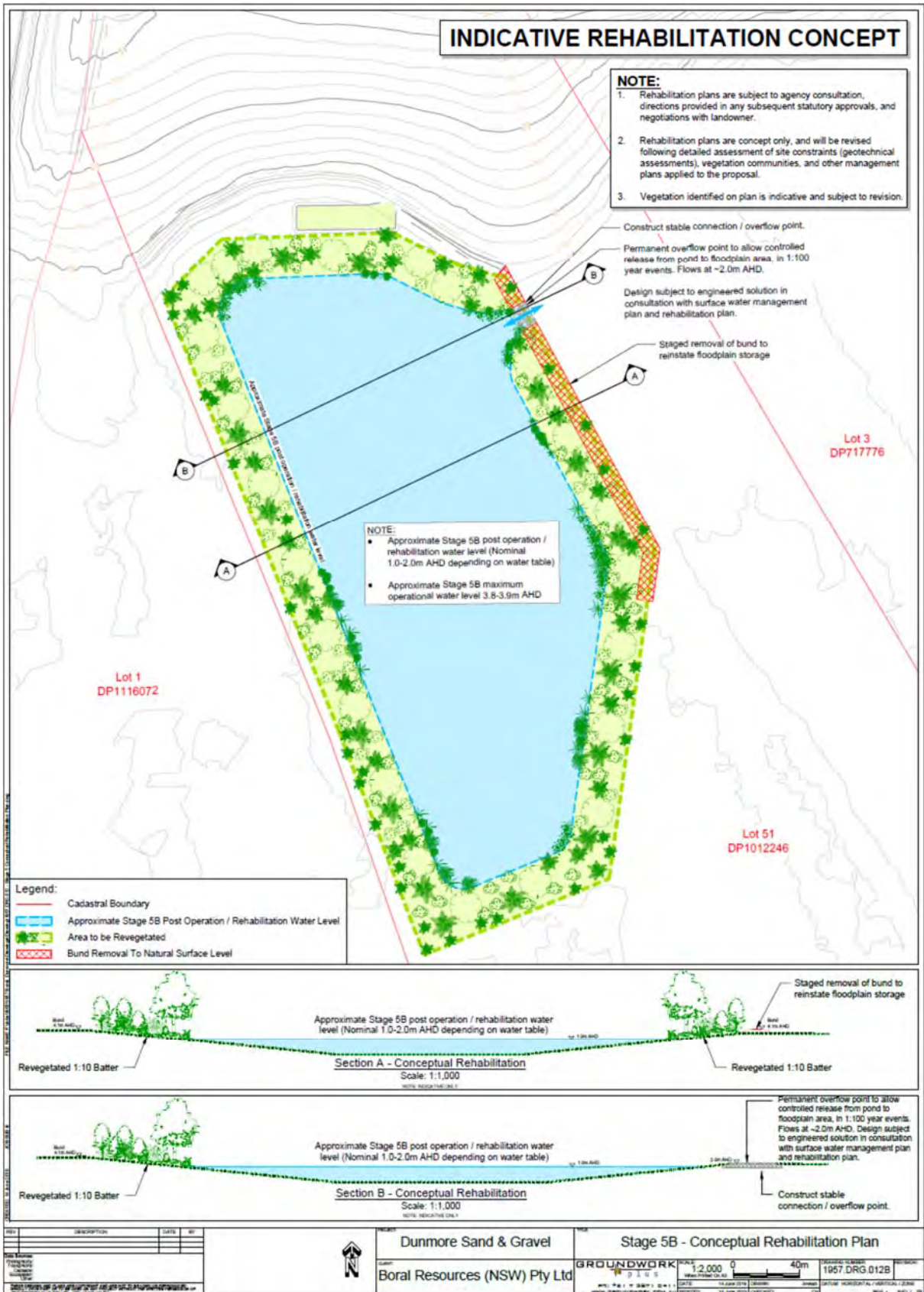


Figure 2.13  
FINAL LANDFORM







APPENDIX 3  
STAGE 5 NOISE RECEIVER LOCATIONS





APPENDIX 2

Environment Protection Licence

# Environment Protection Licence

Licence - 11147

## Licence Details

Number:	11147
Anniversary Date:	01-July

## Licensee

DUNMORE SAND & SOIL PTY LIMITED  
 PO BOX 6041  
 NORTH RYDE NSW 2113

## Premises

DUNMORE LAKES SAND QUARRY  
 TABBITA ROAD  
 DUNMORE NSW 2529

## Scheduled Activity

Crushing, grinding or separating  
 Extractive activities  
 Resource recovery

## Fee Based Activity

## Scale

Crushing, grinding or separating	> 100000-500000 T annual processing capacity
Extractive activities	> 100000-500000 T annually extracted or processed
Recovery of general waste	Any general waste recovered

## Contact Us

NSW EPA  
 6 Parramatta Square  
 10 Darcy Street  
 PARRAMATTA NSW 2150  
 Phone: 131 555  
 Email: [info@epa.nsw.gov.au](mailto:info@epa.nsw.gov.au)

Locked Bag 5022  
 PARRAMATTA NSW 2124



# Environment Protection Licence

Licence - 11147

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# Environment Protection Licence

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Licence - 11147

## Information about this licence

### Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

### Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 - 132 of the Act);
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

### Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

### Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

### Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

### Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).



# Environment Protection Licence

Licence - 11147

The EPA publication “A Guide to Licensing” contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

## Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

## Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

## This licence is issued to:

<b>DUNMORE SAND &amp; SOIL PTY LIMITED</b>
<b>PO BOX 6041</b>
<b>NORTH RYDE NSW 2113</b>

subject to the conditions which follow.



# Environment Protection Licence

Licence - 11147

## 1 Administrative Conditions

### A1 What the licence authorises and regulates

A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Crushing, grinding or separating	Crushing, grinding or separating	> 100000 - 500000 T annual processing capacity
Extractive activities	Extractive activities	> 100000 - 500000 T annually extracted or processed
Resource recovery	Recovery of general waste	Any general waste recovered

### A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
DUNMORE LAKES SAND QUARRY
TABBITA ROAD
DUNMORE
NSW 2529
LOT 1 DP 213575, PART LOT 6 DP 611159, PART LOT 6 DP 1001931, PART LOT 51 DP 1012246, LOT 4 DP 1030504, PART LOT 5 DP 1030504, PART LOT 501 DP 1174897
INCLUDING TABBITA ROAD

A2.2 The premises location is shown on the map below.



# Environment Protection Licence

Licence - 11147



## A3 Information supplied to the EPA

A3.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

# Environment Protection Licence

Licence - 11147

In this condition the reference to "the licence application" includes a reference to:

- a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and
- b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

## A4 Other administrative conditions

### A4.1 PREMISES STAGING

The stages referred to in this licences are shown in Figure 2.2 (Air Quality Monitoring Locations), page 2 – 18 of the Dunmore Sand & Soil report titled "Dunmore Lakes Sand Project Environmental Management Plan incorporating an Environmental Monitoring Program" December 2005.

## 2 Discharges to Air and Water and Applications to Land

### P1 Location of monitoring/discharge points and areas

- P1.1 The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

<i>Air</i>			
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
2	Dust Monitoring		Old Peterborough School House, Swamp Road Dunmore labelled "EPL2" on the map titled "Dunmore Lakes Sand Project EPL 11147 Premises Map", dated May 2023 and filed as DOC23/432211 and displayed in licence condition A2.2.
4	Dust Monitoring		Creagan Residence, Swamp Road Dunmore labelled "EPL4" on the map titled "Dunmore Lakes Sand Project EPL 11147 Premises Map", dated May 2023 and filed as DOC23/432211 and displayed in licence condition A2.2.
7	Dust Monitoring		Renton Residence labelled "EPL7" on the map titled "Dunmore Lakes Sand Project EPL 11147 Premises Map", dated May 2023 and filed as DOC23/432211 and displayed in licence condition A2.2.
8	Dust Monitoring		Toward Dunmore Village - labelled "EPL8" on the map titled "Dunmore Lakes Sand Project EPL 11147 Premises Map", dated May 2023 and filed as DOC23/432211 and displayed in licence condition A2.2.

# Environment Protection Licence

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P1.2 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

P1.3 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

## *Water and land*

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
9	Discharge Quality Monitoring	Discharge Quality Monitoring	Area of valved pipes at Stage 2 pond labelled "EPL9" on the map titled "Dunmore Lakes Sand Project EPL 11147 Premises Map", dated May 2023 and filed as DOC23/432211 and displayed in licence condition A2.2.

P1.4 The following point(s) in the table are identified in this licence for the purpose of the monitoring of weather parameters at the point.

EPA identification no.	Type of Monitoring Point	Description of Location
14	Weather Analysis	Weather station located on the southern side of the quarry and labelled "EPL14" on the map titled "Dunmore Lakes Sand Project EPL 11147 Premises Map", dated May 2023 and filed as DOC23/432211 and displayed in licence condition A2.2.

## 3 Limit Conditions

### L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

### L2 Concentration limits

L2.1 For each monitoring/discharge point or utilisation area specified in the table/s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.

L2.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the

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specified ranges.

L2.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table/s.

L2.4 Water and/or Land Concentration Limits

## POINT 9

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
pH	pH				6.6 - 8.6
Total suspended solids	milligrams per litre				50

## L3 Waste

L3.1 The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below.

Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below.

Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.

This condition does not limit any other conditions in this licence.

Code	Waste	Description	Activity	Other Limits
NA	Virgin excavated natural material	As defined in Scheduled 1 of the Protection of the Environment Act 1997.	Waste disposal (application to land) Resource recovery	VENM imported for waste disposal (application to land) must only be used for the purposes of void reclamation as per Development Consent DA 195-8-2004 MOD 3.  The licensee must not process and/or blend

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more than 120,000 tonnes of VENM per annum for the purposes of resource recovery.

The licensee must comply with condition E2 of this licence.

- L3.2 All fines separated from dredged sand must be placed below the permanent water table within 12 hours of processing the dredged sand.
- L3.3 The authorised amount of waste permitted on the premises cannot exceed 120,000 tonnes at any time.
- L3.4 The height of any stockpile of imported waste must not exceed eight (8) metres.
- L3.5 The licensee must install and maintain a stockpile height marker at the area where imported waste will be stored.

## L4 Noise limits

- L4.1 Noise from the premises must not exceed the following limits:

Location	Shoulder dB(A) LAeq(15 min)	Day dB(A) LAeq(15 min)	Evening dB(A) LAeq(15 min)	Night dB(A) LAeq(15 min)
Renton	46	46	43	37
Dunmore Village	47	49	44	41
Stocker	47	49	44	38
Riverside Dr	43	47	43	38
Allawah PI	48	48	43	38

Note: The night time noise limit for Dunmore Village was determined on the basis of predicted noise levels that would be attained after a noise reduction of 8 dB(A) for the loader and/or loading area.

Note: Location Riverside Dr is representative of Receivers R4 - R10 as referred to in Appendix 3 of Consent DA 195-8-2004 Mod 2.

Location Allawah PI is representative of Receivers R11 - R18 as referred to in Appendix 3 of Consent DA 195-8-2004 Mod 2

- L4.2 For the purposes of condition L4.1:
- Shoulder is the period 6am to 7am Monday to Saturday
  - Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6 pm Sundays and Public holidays,
  - Evening is defined as the period from 6pm to 10pm

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- Night is defined as the period from 10pm to 6am.

- L4.3 Noise from the premises is to be measured at the most affected point on or within the residential boundary or at the most affected point within 30m of the dwelling (rural situations) where the dwelling is more than 30m from the boundary to determine compliance with the LAeq(15 minute) noise limit in this condition.

The modification factors presented in Section 4 of the NSW Industrial Noise Policy must also be applied to the measured noise levels where applicable.

- L4.4 The noise emission limits identified in this condition apply under meteorological conditions of:
- wind speeds up to 3 m/s at 10metres above the ground level; or
  - temperature inversions conditions of up to 6oC/100m and wind speeds up to 2m/s at 10 metres above ground level.

## L5 Hours of operation

- L5.1 All activities at the premises except inaudible maintenance may only be carried out in accordance with the following table.

Activity	Hours of Operation - Monday to Friday	Hours of Operation - Saturday	Hours of Operation - Sunday and Public Holidays
Excavator extraction of sand and/or soil	0630 - 1800	0630 - 1800	Nil
Sand dredging and processing	0600 - 1800	0600 - 1800	0800 - 1600
Delivery and distribution	0500 - 2400	0600 - 1800	0800 - 1600
Delivery and distribution (Stage 5 via Riverside Dr)	0700 - 2200	0700 - 1800	0800 - 1600

- L5.2 The above condition does not apply to the delivery of material if that delivery is required by police or other authorities for safety reasons; and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification must be provided to the EPA and affected residents as soon as possible or within a reasonable period in the case of emergency.
- L5.3 The hours of operation specified may be varied with written consent if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected.

## L6 Potentially offensive odour

- L6.1 The licensee must not cause or permit the emission of offensive odour beyond the boundary of the premises.

Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

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- L6.2 No condition of this licence identifies a potentially offensive odour for the purposes of Section 129 of the Protection of the Environment Operations Act 1997.

## 4 Operating Conditions

### O1 Activities must be carried out in a competent manner

- O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

### O2 Maintenance of plant and equipment

- O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:

- a) must be maintained in a proper and efficient condition; and
- b) must be operated in a proper and efficient manner.

### O3 Dust

- O3.1 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.
- O3.2 All sealed and unsealed trafficable areas must be maintained, at all times, in a condition which effectively minimises the emission of wind-blown or traffic-generated dust.
- O3.3 All stockpiles and handling areas must be maintained, at all times, in a condition which effectively minimises wind blown and traffic generated dust.

### O4 Processes and management

- O4.1 WASTEWATER TREATMENT

The on-site wastewater treatment system must comply with the requirements of the Environment and Health Protection Guidelines – On-site Sewage Management for Single Households; January 1998.

### O5 Other operating conditions

- O5.1 TRUCK WASH

All vehicles must pass through the truck wash facility prior to leaving the premises.

- O5.2 STORMWATER/SEDIMENT CONTROL - CONSTRUCTION AND OPERATIONAL PHASES

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- O5.3 Any pond subject to dredging, or containing turbid water due to recent dredging, must be maintained and operated to prevent discharges of any water from these ponds.
- O5.4 Backfilling of the dredge ponds must not take place when they are overflowing.
- O5.5 The fines return pond(s) must be bunded to an elevation that prevents inundation by floodwaters caused in a 1:100 year flood level.
- Note: The predicted 1:100 year flood level for the site is 3.7 m AHD.
- O5.6 TRIBUTARY INTEGRITY - WESTERN, NORTHERN AND EASTERN TRIBUTARIES (STAGE 2)
- O5.7 The integrity of the Western and Northern Tributaries must be maintained at least until the Stage 2 Lake is sufficiently large that the surface water from the tributaries can enter the lake without any adverse downstream impacts.
- O5.8 The integrity of the Western Tributary exit and entry channels from the Stage 2 Lake must be maintained until permanent stable channels are created and revegetated to maintain flows through Stage 2 and minimise downstream impacts.
- O5.9 The licensee must not undertake extraction within 3m of the bank of the Eastern Tributary. Batter slopes from this extraction must be no steeper than 1:3 (v:h).
- O5.10 TRIBUTARY INTEGRITY - ROCKLOW CREEK (STAGE 3)
- O5.11 Prior to the commencement of extraction in Sub-Stage 3C1, the applicant must have completed the permanent realignment of Rocklow Creek and the realignment must be stable.
- O5.12 Sand must not be extracted within a distance of 3 metres from the bank of the realigned Rocklow Creek. The dredge pond adjacent to the realigned creek must have at least a 1:2 (v:h) batter from the 3 metre set back.

## 5 Monitoring and Recording Conditions

### M1 Monitoring records

- M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.
- M1.2 All records required to be kept by this licence must be:
- in a legible form, or in a form that can readily be reduced to a legible form;
  - kept for at least 4 years after the monitoring or event to which they relate took place; and
  - produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
- the date(s) on which the sample was taken;
  - the time(s) at which the sample was collected;



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- c) the point at which the sample was taken; and
- d) the name of the person who collected the sample.

## M2 Requirement to monitor concentration of pollutants discharged

M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

### M2.2 Air Monitoring Requirements

#### POINT 2

Pollutant	Units of measure	Frequency	Sampling Method
Ash	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Combustible solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Insoluble solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016

#### POINT 4

Pollutant	Units of measure	Frequency	Sampling Method
Ash	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Combustible solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Insoluble solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016

#### POINT 7

Pollutant	Units of measure	Frequency	Sampling Method
Ash	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Combustible solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Insoluble solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016

#### POINT 8

Pollutant	Units of measure	Frequency	Sampling Method
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Ash	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Combustible solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Insoluble solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016

## M2.3 Water and/ or Land Monitoring Requirements

### POINT 9

Pollutant	Units of measure	Frequency	Sampling Method
pH	pH	Special Frequency 1	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample
Turbidity	nephelometric turbidity units	Special Frequency 1	Grab sample

Note: For the purposes of Condition M2.3, "Special Frequency 1" means daily during discharge

Note: In the event that the above monitoring location become inaccessible due to site flooding, the associated monitoring requirements may be delayed until the affected location becomes safely accessible. In the event site flooding prevents monitoring the licensee must notify the Environment Protection Authority.

## M3 Testing methods - concentration limits

M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:

- any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
- if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or
- if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2022* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

M3.2 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

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## M4 Weather monitoring

M4.1 For each monitoring point specified in the table below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.

POINT 14

Parameter	Units of Measure	Frequency	Sampling Method
Rainfall	mm	Continuous	AS 3580.14

## M5 Recording of pollution complaints

M5.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

M5.2 The record must include details of the following:

- a) the date and time of the complaint;
- b) the method by which the complaint was made;
- c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- d) the nature of the complaint;
- e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- f) if no action was taken by the licensee, the reasons why no action was taken.

M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

## M6 Telephone complaints line

M6.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

M6.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

M6.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

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## M7 Other monitoring and recording conditions

### M7.1 NOISE COMPLIANCE ASSESSMENT

A noise compliance assessment must be undertaken by a suitably qualified acoustical consultant. The noise compliance assessment must include, but need not be limited to a comparison of actual operational noise levels from the premises with the noise limits specified in this licence. The noise assessment must include but not necessarily be limited to the potentially most affected residential receiver.

Note: The noise assessment report applies to compliance with noise limits during extraction of production sand.

## 6 Reporting Conditions

### R1 Annual return documents

R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

1. a Statement of Compliance,
2. a Monitoring and Complaints Summary,
3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

R1.3 Where this licence is transferred from the licensee to a new licensee:

- a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
- b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:

- a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is



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given; or

b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.

R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

a) the licence holder; or

b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

## R1.8 REPORTING OF ENVIRONMENTAL MONITORING DATA

Tabular and listed data must be supported by graphical and statistical presentation of the data including comparison with relevant limits or goals. Monitoring data collected in previous years must be incorporated into the report so that trends in environmental monitoring data can be determined.

### DUST DEPOSITION

For dust deposition monitoring, graphical presentation of the data for insoluble solids for the reporting period as well as preceding years (where such data exists) must be provided. This graph must include a data trendline and a line showing the EPA Impact Assessment Criteria as detailed in the EPA publication "Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in New South Wales".

### WATER QUALITY

For water quality monitoring, graphical presentation of the data for all pollutants required by this licence for the reporting period as well as preceding years (where such data exists) must be provided. This graph must include a comparison with the limit conditions specified in these licence conditions and with Aquatic Ecosystem Protection Physical, Chemical and Toxicant Trigger Values described in Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000). The Australian and New Zealand Guidelines for Fresh and Marine Water Quality is available at: <http://www.deh.gov.au/water/quality/nwqms/volume1.html>

### POTENTIAL ACID SULPHATE SOILS

The results of all monitoring required under condition E1.7 and E1.8 must be submitted to the EPA in the annual return.

A graph showing pH of the water at the monitoring frequency specified in Condition E1.8 for each year must be included in the annual return. The format should show the pond water pH trend over the life of the licence.

A graph showing quarterly pH in the up and down gradient groundwaters at the monitoring frequency specified in Condition E1.9 must be provided in a format that shows the groundwater pH trend over the life of the licence.

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## R2 Notification of environmental harm

Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.

R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which they became aware of the incident.

## R3 Written report

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:

- a) where this licence applies to premises, an event has occurred at the premises; or
- b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

R3.3 The request may require a report which includes any or all of the following information:

- a) the cause, time and duration of the event;
- b) the type, volume and concentration of every pollutant discharged as a result of the event;
- c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
- d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
- e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
- f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
- g) any other relevant matters.

R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

## 7 General Conditions

### G1 Copy of licence kept at the premises or plant

G1.1 A copy of this licence must be kept at the premises to which the licence applies.

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G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.

G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

## G2 Other general conditions

### G2.1 Completed Programs

Program	Description	Completed Date
PRP 1 - Noise Management Plan	PRP 1 - Noise Management Plan - further reduction of noise levels at the most affected residential premises. Ongoing program to progressively identify and reduce significant noise emissions from the premises.(+)	30-December-2011
Investigation of discharge to waters - Stage 2-4	Investigation of pollutant discharges from Stage 2 dredge pond to assist in the review of licence conditions for discharges to water from the premises.	30-January-2023

## 8 Pollution Studies and Reduction Programs

### U1 Monitoring and assessment of discharge to waters - Stage 2 pond

U1.1 The Licensee must undertake monitoring as identified in a schedule agreed to in writing with the EPA prior to the commencement of the monitoring program.

Note: For the purposes of this condition, "a schedule agreed to in writing" means the letter from the Licensee to the EPA dated 29 August 2023 (filed as DOC23/753886-2). The EPA may vary this schedule in discussion with the Licensee at any time.

U1.2 The Licensee must engage a suitably qualified person(s) to prepare a written report. The report must include but not be limited to:

a. the frequency and volume of water discharges at monitoring point EPA identification no. 9;

b. the rainfall events that are likely to result in:

i. discharges via the valved pipes at the Stage 2 pond;

ii. overflows from the Stage 2 pond; and

iii. inability to access the discharge location to undertake monitoring

c. water monitoring results for water discharges at monitoring point EPA identification no. 9 identified in the schedule;

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d. an assessment of the water pollutants present in discharges at monitoring point EPA identification no. 9. The assessment should identify those pollutants that may pose a risk of non-trivial harm to human health and the environment;

e. recommendations for the regulation of water discharges at monitoring point EPA identification no. 9 in the Licence. This must include but not be limited to:

- i. water pollutants to be monitored, discharge limits and reporting requirements;
- ii. water discharge volume and frequency requirements; and
- iii. Stage 2 pond freeboard for proper and efficient water management

U1.3 Written updates on the preparation of the report and water quality monitoring undertaken under this PRP must be provided to the EPA by:

- a. 19 October 2023 (4 months from issue of variation)
- b. 15 February 2024 (8 months from issue of variation)

U1.4 A written report must be provided to the EPA by 21 June 2024 (12 months from issue of variation)

Note: Guidance on the regulation of water pollution can be found on the NSW EPA website. This includes the EPA Licensing Factsheet "Using environment protection licensing to control water pollution".

U1.5 The written progress and final report must be made publicly available on the website that relates to the business or activity subject to the Licence, being <https://www.boral.com.au/locations/boral-dunmore-operations>

Note: This requirement is to ensure the community has access to relevant and meaningful information about pollution.

## 9 Special Conditions

### E1 Disposal of Potential Acid Sulphate Soils (PASS) under Water

E1.1 Soil that has been assessed by a Certified Practicing Soil Scientist (CPSS) in accordance with the ASSMAC guidelines and determined to be PASS and which satisfies all of the requirements for classification as VENM, except that it contains sulfidic soils, and which is disposed of under water according to this licence, may be classified as VENM in accordance with part (b) of the definition of VENM in the Appendix to Schedule 1 to the POEO Act 1997.

E1.2 The facility must receive documentation for each truck load of PASS received at the premises (see reporting conditions) that demonstrates that the excavation of PASS and its transport and handling was conducted in accordance with the NSW Acid Sulfate Soil Manual (Acid Sulfate Soil Management Advisory Committee, August 1998) to prevent the generation of acid.



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E1.3 PASS must be disposed of at least 1 metre below the permanent water table level at the premises.

E1.4 Any PASS received at the premises must be placed below the water table within 24 hours of the time of its excavation at the originating site.

E1.5 Any PASS which has dried out, undergone any oxidation of sulfidic minerals or which has a pH of less than 5.5 must not be disposed-of at this premises.

E1.6 The pH of the PASS immediately prior to under-water disposal must be not less than 5.5.

The pH of the water into which the PASS is placed must not be less than 6.5 at any time.

If the pH of the water falls below 6.5 the licensee must not receive any more PASS at the premises until approval to continue is received in writing from the EPA.

E1.7 The pH of each load of the PASS must be tested at the disposal site immediately prior to its placement under water using the test method referred to in NSW Acid Sulfate Soil Manual (Method 21A and/or Method 21Af).

E1.8 The pH of the water into which the PASS is placed must be monitored using the sampling method, unit of measure, and sampling frequency, specified in the table below:

Pollutant	Unit of Measure	Frequency	Sampling Method
pH	pH	Special Frequency 2	Grab Sample

Note: Special Frequency 2 is daily during the PASS placement into water and thereafter daily during operational hours for a period of one month from the date the last load of PASS was placed underwater. The pH of the water must be monitored weekly at all other times.

E1.9 The Licensee must monitor the pH of up and down gradient groundwaters at the premises at least once per every 3 months and for a minimum of 1 year after the last load of PASS has been disposed-of.

If the pH of the water falls below 6.5 the licensee must notify the EPA in writing as soon as practicable and within 24 hours.

E1.10 The licensee must retain certain documentation for each truck load of PASS received at the site which indicates:

- i. the details of the originating site (name, address, owner & developer, contact details);
- ii. the details of the transporter (name, address, contact details, vehicle registration);
- iii. date and time of the extraction of the PASS;
- iv. pH of the PASS at the time of its extraction, and at the time immediately prior to its placement underwater; and
- v. the name of the person (certified practicing soil scientist) who assessed the material and classified it as PASS.

The documentation must be retained by the licensee for four years from the date of receipt of the PASS

E1.11 Waste other than VENM must not be deposited in the water.

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## E2 VENM Management

- E2.1 The licensee must prepare a “VENM” Verification Procedure” and ensure the Authority is provided with an up to date version of the Procedure.

The “VENM Verification Procedure” prepared must be used for all material assessed as VENM.

The licensee must retain a copy of all assessments made using the “VENM Verification Procedure”.

- E2.2 Backfilling of the voids created by sand dredging with VENM must be undertaken in a manner, and with material of suitable physical characteristics, so that it does not change the direction or rate of groundwater flow from the site to Rocklow Creek.

## E3 Financial Assurance

- E3.1 A financial assurance in the form of an unconditional and irrevocable and on demand guarantee from a bank, building society or credit union operating in Australia as ‘Authorised Deposit-taking Institutions’ under the *Banking Act 1959* of the Commonwealth of Australia and supervised by the Australian Prudential Regulatory Authority (APRA) must be provided to the EPA. The financial assurance must be in favour of the EPA in the amount of five hundred thousand dollars (\$500,000). The financial assurance is required to secure or guarantee funding for works or programs required by or under this licence.
- E3.2 The licensee must provide to the EPA, along with the original counterpart guarantee, confirmation in writing that the financial institution providing the guarantee is subject to supervision by the Australian Prudential Regulatory Authority (APRA).
- E3.3 The financial assurance must be maintained during the operation of the facility and thereafter until such time as the EPA is satisfied the premises is environmentally secure.
- E3.4 The financial assurance must be replenished by the full amount claimed or realised if the EPA has claimed on or realised the financial assurance or any part of it to undertake a work or program required to be carried out by the licence which has not been undertaken by the licence holder.
- E3.5 The EPA may require an increase in the amount of the financial assurance at any time as a result of reassessment of the total likely costs and expenses of rehabilitation of the premises.
- E3.6 The licensee must provide to the EPA the original counterpart guarantee within five working days of the issue of the financial assurance required by condition E3.1.
- E3.7 The EPA may claim on a financial assurance under s303 of the POEO Act if a licensee fails to carry out any work or program required to comply with the conditions of this licence.

# Environment Protection Licence

Licence - 11147

## Dictionary

### General Dictionary

<b>3DGM [in relation to a concentration limit]</b>	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
<b>Act</b>	Means the Protection of the Environment Operations Act 1997
<b>activity</b>	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
<b>actual load</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>AM</b>	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
<b>AMG</b>	Australian Map Grid
<b>anniversary date</b>	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
<b>annual return</b>	Is defined in R1.1
<b>Approved Methods Publication</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>assessable pollutants</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>BOD</b>	Means biochemical oxygen demand
<b>CEM</b>	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
<b>COD</b>	Means chemical oxygen demand
<b>composite sample</b>	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
<b>cond.</b>	Means conductivity
<b>environment</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>environment protection legislation</b>	Has the same meaning as in the Protection of the Environment Administration Act 1991
<b>EPA</b>	Means Environment Protection Authority of New South Wales.
<b>fee-based activity classification</b>	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
<b>general solid waste (non-putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

# Environment Protection Licence

Licence - 11147

<b>flow weighted composite sample</b>	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
<b>general solid waste (putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>grab sample</b>	Means a single sample taken at a point at a single time
<b>hazardous waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>licensee</b>	Means the licence holder described at the front of this licence
<b>load calculation protocol</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>local authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>material harm</b>	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
<b>MBAS</b>	Means methylene blue active substances
<b>Minister</b>	Means the Minister administering the Protection of the Environment Operations Act 1997
<b>mobile plant</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>motor vehicle</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>O&amp;G</b>	Means oil and grease
<b>percentile [in relation to a concentration limit of a sample]</b>	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
<b>plant</b>	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
<b>pollution of waters [or water pollution]</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>premises</b>	Means the premises described in condition A2.1
<b>public authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>regional office</b>	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
<b>reporting period</b>	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
<b>restricted solid waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>scheduled activity</b>	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
<b>special waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>TM</b>	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .

# Environment Protection Licence

Licence - 11147

<b>TSP</b>	Means total suspended particles
<b>TSS</b>	Means total suspended solids
<b>Type 1 substance</b>	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
<b>Type 2 substance</b>	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
<b>utilisation area</b>	Means any area shown as a utilisation area on a map submitted with the application for this licence
<b>waste</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>waste type</b>	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non-putrescible), special waste or hazardous waste
<b>Wellhead</b>	Has the same meaning as in Schedule 1 to the Protection of the Environment Operations (General) Regulation 2021.

Mr Trevor Jones

Environment Protection Authority

(By Delegation)

Date of this edition: 05-October-2000

# Environment Protection Licence

Licence - 11147

## End Notes

- 1 Licence varied by notice 1033699, issued on 04-May-2004, which came into effect on 29-May-2004.
- 2 Licence varied by notice 1041632, issued on 17-Feb-2005, which came into effect on 14-Mar-2005.
- 3 Licence varied by notice 1054794, issued on 03-Apr-2006, which came into effect on 28-Apr-2006.
- 4 Licence varied by notice 1078049, issued on 13-Sep-2007, which came into effect on 13-Sep-2007.
- 5 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 6 Licence varied by notice 1119818, issued on 21-Oct-2010, which came into effect on 21-Oct-2010.
- 7 Licence varied by notice 1126580, issued on 04-Apr-2011, which came into effect on 04-Apr-2011.
- 8 Licence varied by notice 1127770, issued on 29-Apr-2011, which came into effect on 29-Apr-2011.
- 9 Licence varied by notice 1502498 issued on 03-Nov-2011
- 10 Licence varied by notice 1502870 issued on 15-May-2012
- 11 Licence varied by notice 1544813 issued on 26-Sep-2016
- 12 Licence varied by notice 1587767 issued on 17-Dec-2019
- 13 Licence varied by notice 1593187 issued on 13-May-2020
- 14 Licence varied by notice 1599468 issued on 17-Jun-2021
- 15 Licence fee period changed by notice 1609836 on 21-Jun-2021
- 16 Licence varied by notice 1610725 issued on 19-Nov-2021
- 17 Licence varied by notice 1616983 issued on 07-Nov-2022
- 18 Licence varied by notice 1628799 issued on 23-Jun-2023
- 19 Licence varied by notice 1632436 issued on 15-Sep-2023



APPENDIX 3

2023 Audit Photographic Evidence



**Clean entry and exit conditions at Tabbita Road.**





**Entry and exit at Tabbita Road.**



**Bunded fluids and oils**



Refuelling area, bunding and fire equipment



Grease and oils storage with bunding



**Dangerous goods storage**



**Refuelling area**



**Stage 5A pond**



**Stage 5B active extraction area**



**Stage 5B fuel barge**





**Stage 5B spill kits**



**Stage 2 pond**



**Rehabilitation vegetation around Stage 2 pond**



**Bird refuge island within Stage 2 pond**



Sand drying and storage area



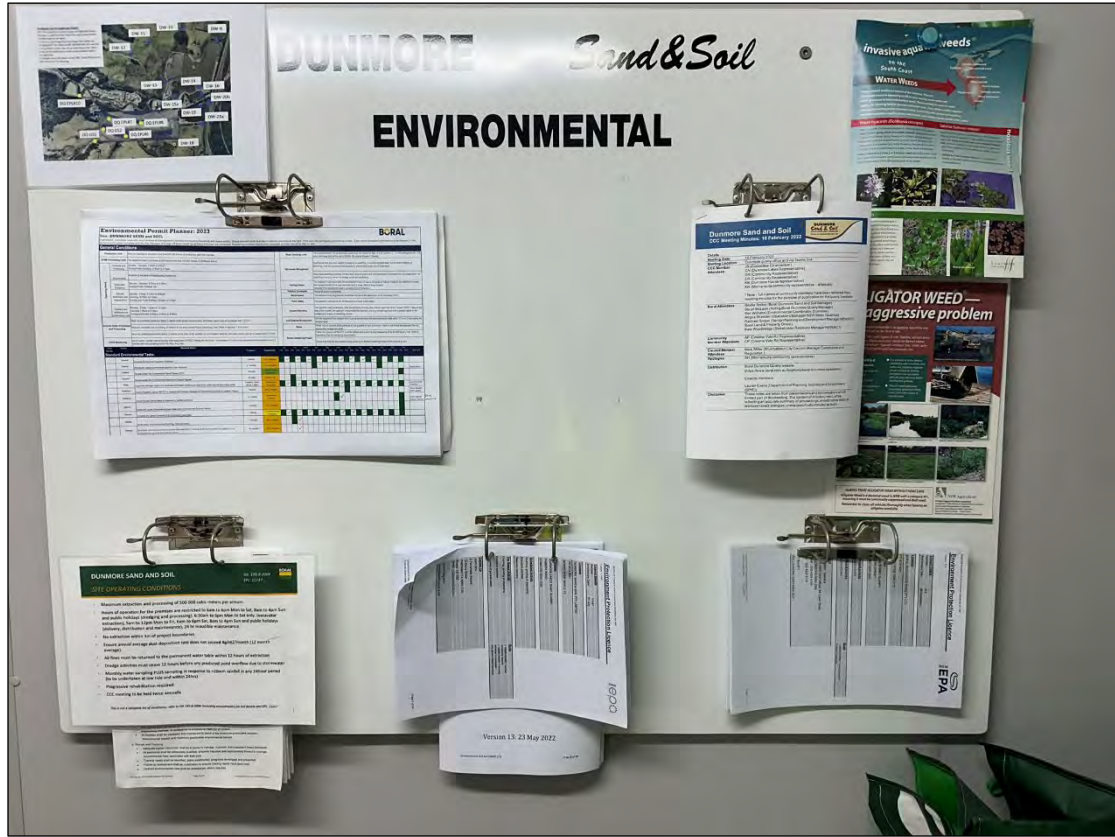
**Sand and water separation plus storage area with workshop in background**



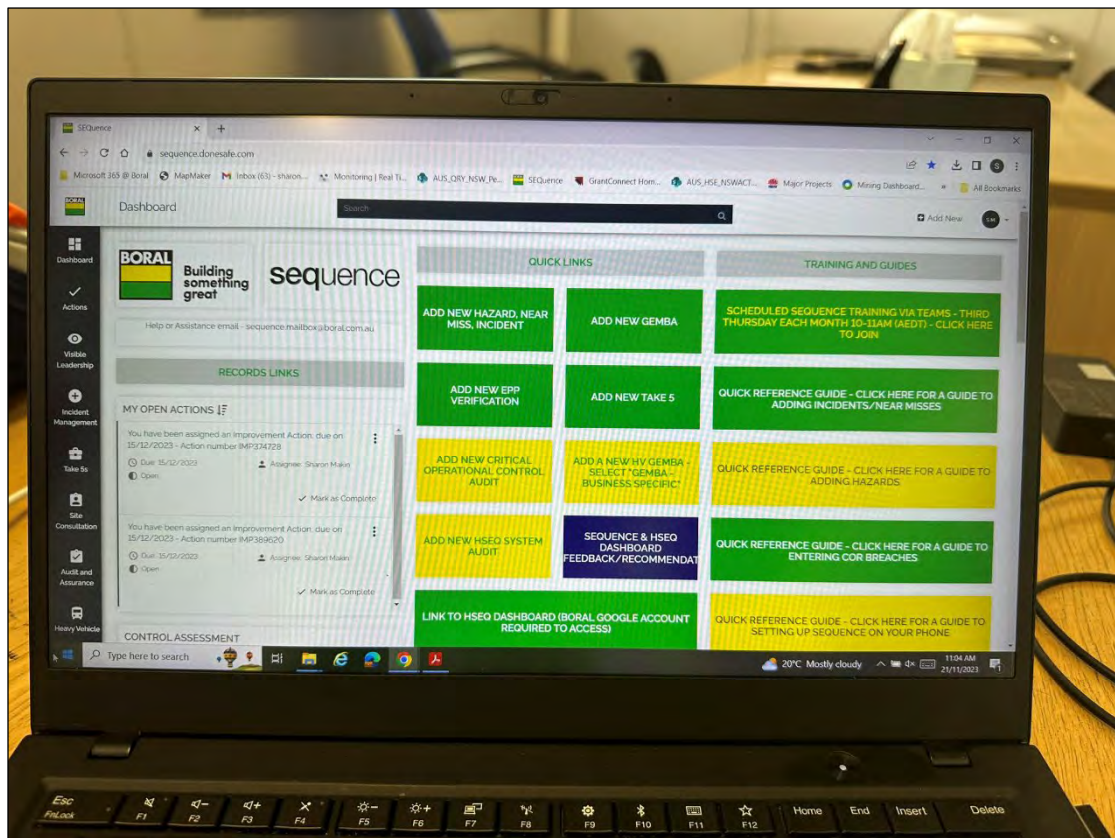
**Rocklow Creek adjacent to Stage 3 pond**



**Stage 2 water release valve location**



Dunmore Sand and Soil Office Environmental Notice Board



Example of Borals Environmental Management System – Sequence



APPENDIX 4

List of Documents Reviewed For Audit



## 11600 – Dunmore Soil and Sand

Documents obtained from <https://www.boral.com.au/locations/boral-dunmore-operations>. & <https://www.planningportal.nsw.gov.au/major-projects> & <https://waterregister.waternsw.com.au/water-register-frame> and provided by Boral post site visit - these documents are highlighted green

Folder Name/Category	Documentation	Notes
Development Consent (6 documents)	1. Dunmore Lakes Mod 2 - Notice of Modification	
	2. Dunmore Lakes MOD 2 - Consolidated Consent	
	3. Dunmore Lakes Mod 2 Assessment Report	
	4. Dunmore Lakes Mod 2_ Referral letter to IPC	
	5. Dunmore Lakes Mod 2 - IPC Statement of Reasons	
	6. Dunmore Lakes Mod 2_Boral EA_Reduced F	
EPL 11147 (12 documents)	1. 2019-2020_DSS_EPL Annual Return.docx	
	2. 2019-2020_DSS_EPL_Annual Return_Statement of Compliance.pdf	
	3. 2020-2021_DSS_EPL_Annual Return.docx	
	4. 2020-2021_DSS_EPL_Annual Return_Statement of Compliance.pdf	
	5. 2021-2022_DSS_EPL_Annual Return.docx	
	6. 2021-2022_DSS_EPL_Annual Return_Statement of Compliance.pdf	
	7. 2022-2023_DSS_EPL_Annual Return.docx	
	8. 2022-2023_DSS_EPL_Annual Return_Statement of Compliance.pdf	
	9. May 2022 - EPL-DSS PIRMP v13-Public Version.docx	
	10. May 2023-EPL-Dunmore-Lakes-Sand-Project-POELA-Dust-monitoring.pdf	
	11. June 2023 - EPL-Dunmore-Lakes-Sand-Project-POELA-Surface-Water-Data.pdf	
	12. July 2023-EPLAnnual_Noise_Compliance_Assessment_Reports_Dunmore_Sand_&_Soil.pdf	
	1. February 2017-DSS-AQMP.pdf	
	2. June 2021-DSS_LTMS_v3.pdf	
	3. June 2021-DSS-Air-Quality-Management-092021.pdf	
	4. June 2021-DSS-Noise-Management-Plan-092021.pdf	

Folder Name/Category	Documentation	Notes	
EMPs (14 documents)	5. June 2021-DSS-Waste-Management-Plan-092021.pdf		
	6. July 2021_DSS-Rehabilitation-Management-Plan-092021.pdf		
	7. July 2021-DSS-Flora-and-Fauna-Management-Plan-092021.pdf		
	8. July 2021-DSS-Heritage-Management-Plan-092021.pdf		
	9. July 2021-DSS-Traffic-Management-Plan-092021.pdf		
	10. August 2021-DSS - Acid Sulfate Soil Management plan.pdf		
	11. February 2022-DSS Stage 5 Soil & Water Management Plan V4.pdf		
	12. May 2022-DSS_PIRMP.pdf		
	13. May 2023-DSS_PIRMP.pdf		
	14. July 2023 DSS_TMP.pdf		
	Environmental Management (1 document)	1. March 2023-DSS_Environmental_Management_Strategy.pdf	
	Complaint Register (1 document)	1. May 2023- Current - DSS - COMPLAINTS_REGISTER.pdf	
Community Consultative Committee (5 documents)	1. September 2020-DSS CCC Minutes.pdf		
	2. February 2021_DSS_CCC_Minutes.pdf		
	3. September 2021- DSS CCC Minutes.pdf		
	4. February 2022-DSS_CCC_Minutes.pdf		
	5. February 2023-DSS-CCC-Minutes.pdf		
Public Reporting Annual Reviews (2019-2020) & (2021-2022) (8 documents)	1. 2019-2020-1907 DSS-Report AEMR Appendix C Noise.pdf		
	2. 2019-2020-2009 DSS - Report AEMR Appendix D Groundwater Pt 2.pdf		
	3. 2019-2020-2009- DSS- Annual Review.pdf		
	4. 2019-2020-2009 DSS-Report AEMR Appendix D Groundwater Pt 1.pdf		
	5. 2020-2021_DSS Annual Review FY21_v2.pdf		
	6. 2021-2022-DSS_Annual_Groundwater_Monitoring_Report.pdf		
	7. 2021-2022-DSS_Annual_Review.pdf	Includes Sept 2021 Annual Noise monitoring assessment	
	8. 2022-2023_DSS Annual Review FY23.pdf		

Folder Name/Category	Documentation	Notes
Annual Noise Compliance Assessment Reports (3 documents)	<ol style="list-style-type: none"> <li>July 2020-2007 DSS - Report Annual Noise Compliance Assessment.pdf</li> <li>July 2022_DSS_Annual_Noise_Monitoring_Report.pdf</li> <li>July 2023-EPLAnnual_Noise_Compliance_Assessment_Reports_Dunmore_Sand_&amp;_Soil.pdf</li> </ol>	
Public Reporting - independent Environmental/ Consent Auditing (2 document)	<ol style="list-style-type: none"> <li>November 2020 - IEC - 2011 DSSQ Quarry Report Independent Environmental Audit</li> <li>November 2020 - IEC - 2011 DSSQ Quarry Report IEA_ Boral response to recommendations</li> </ol>	
Enviro Checklist (3 documents)	<ol style="list-style-type: none"> <li>February 2023_DSS_Enviro Checklist.pdf</li> <li>June 2023_DSS_Enviro Checklist.pdf</li> <li>July 2023_DSS_Enviro Checklist.pdf</li> </ol>	
VENM (3 documents)	<ol style="list-style-type: none"> <li>October 2023_DSS_VENM(b)_Docket 1.pdf</li> <li>October 2023_DSS_VENM(b)_Docket 2.pdf</li> <li>October 2023_DSS_VENM(b)_inbound materials_Docket.pdf</li> </ol>	
Water Licence information (3 documents)	<ol style="list-style-type: none"> <li>11600_Boral S&amp;S WAL24477_Water Licence.pdf</li> <li>11600_Boral S&amp;S 10WA106714_Water Licence.pdf</li> <li>11600_Boral S&amp;S WAL42100_Water Licence.pdf</li> </ol>	
Incident documents (3 documents)	<ol style="list-style-type: none"> <li>20220420_Boral S&amp;S_ltr to DPE_Notification of Debris Incident.pdf</li> <li>20220726_Boral S&amp;S_ltr to EPA_EPA-DRAFT Cleanup Incident Notice.pdf</li> <li>20231213_Boral S&amp;S_Xl sheet recording incidents.csv</li> </ol>	



APPENDIX 5

Department of Planning and Environment – Independent Environmental  
Audit 2023 Correspondence

Our ref: DA195-8-2004-PA-61

Mr Matt Bray

Stakeholder and Environmental Advisor

Boral Resources (NSW) Pty Ltd

38 Tabbita Road

DUNMORE NSW 2529

19/10/2023

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Sent via the Major Projects Portal only

Dear Mr Bray

### **Dunmore Lakes Sand Extraction Project (DA 195-8-2004)**

#### **Independent Environmental Audit 2023**

I refer to your email letter of 18 October 2023 seeking approval of Mr Stephen McCall of Environmental Property Services as the lead auditor for the upcoming Independent Environmental Audit of Dunmore Lakes Sand Extraction Project (the development), in accordance with Schedule 5, Condition 10 of development consent 195-8-2004, as modified (the consent).

Having considered the qualifications and experience of Mr McCall, the Planning Secretary endorses the appointment of Mr McCall to undertake the audit in accordance with Schedule 5, Condition 10 of the consent. This approval is conditional on Mr McCall being independent of the development and maintaining a relevant industry certification.

Please ensure this correspondence is appended to the Independent Audit Report.

The audit is to be conducted in accordance with AS/NZS ISO 19011 Australian/New Zealand Standard: Guidelines for quality and/or environmental management systems auditing and you may wish to consider the Audit Post Approval Requirements (Department 2020 or as updated). A copy of this guideline can be located at <http://planning.nsw.gov.au/Policy-and-Legislation/Mining-and-Resources/Integrated-Mining-Policy>.

The audit report is to include the following:

1. consultation with the relevant agencies;
2. a compliance table indicating the compliance status of each condition of approval and any relevant EPL;

3. not use the term “partial compliance”;
4. recommend actions in response to non-compliances;
5. review the adequacy of plans and programs required under this consent; and
6. identify opportunities for improved environmental management and performance.

Within six weeks of commissioning this audit, Boral is to submit a copy of the audit report to the Planning Secretary, Council EPA and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report and a timetable to implement the recommendations. Prior to submitting the audit report to the Planning Secretary, it is recommended that Boral review the report to ensure it complies with the relevant consent condition.

Failure to meet these requirements will require revision and resubmission of the Audit Report.

Should you have any enquiries in relation to this matter, please contact Georgia Dragicevic, Senior Compliance Officer, on (02) 4247 1852 or by email to [Georgia.Dragicevic@planning.nsw.gov.au](mailto:Georgia.Dragicevic@planning.nsw.gov.au).

Yours sincerely

A handwritten signature in black ink, appearing to read "K. O'Reilly".

Katrina O'Reilly  
Team Leader - Compliance  
Compliance

As nominee of the Planning Secretary